Find Your Way

Time Needed: 2 Hours
Skill Level: Basic
Number of Youth: 12
Deployment Segment: Mobilization
Internet Required: No

Life Skill Objectives:

- **Teamwork:** Practice making decisions as a team as you navigate your world and the world that is being experienced by your Service Member
- **Problem Solving:** Work with others to solve problems or conflicts and develop communication skills
- **Self-responsibility:** Learn to take responsibility for your world at a local, regional and global level, and understand how that impacts your Service Member and Family

Resilience Skill Objectives:

- **Emotional:** Approach challenges in a positive and optimistic way
- **Social:** Respond to others with authentic, active and constructive interest

Science and Technology Objectives:

- Understand navigation using a compass and maps

Activity Overview:
Youth will learn about the use of a compass, use a compass to navigate and create a map to help others find their way.

Shout Out to Youth!
Learn to navigate using a compass and then use your compass to create maps!

Prerequisites: None

Breakdown of Activities:

Icebreaker	Silent Scramble	(10 Minutes)
Activity 1:	What Is a Compass?	(10 Minutes)
Activity 2:	Pacing	(20 Minutes)
Activity 3:	Find Your Way Back	(10 Minutes)
Activity 4:	Create a Map	(40 Minutes)
Talk it Over		(20 Minutes)
Closing & Cleanup		(10 Minutes)

Budget Range for Activity: $1/youth

Space Needed:
You will need a large open space like the county fairgrounds, a ball field or park; also arrange for a bad-weather backup such as a large gymnasium.

Before the Event

Get Ready:

Tasks for Lead Volunteer

- Do Volunteer Training with the additional OMK Tech Discovery training (found at: http://www.4-hmilitarypartnerships.org/p.aspx?tabid=187)
- Review the activity, all materials and handouts

Do Ahead:

In coordination with the Military Point of Contact:

1. Schedule use of the OMK Tech Discovery Tool Kit. (If you anticipate a large group of youth, schedule additional OMK Tech Discovery Tool Kits. 1 Kit=12 youth.)
2. Schedule Uniformed Service Member and at least 1 volunteer per 6 youth to participate in the activity.
3. Schedule a Military Family Life Consultant (MFLC).
4. Borrow or buy supplies.
5. Contact volunteers and go through online training (to learn more before you show up about OMK and OMK Tech Discovery).
6. Find an outdoor space large enough to do the activity and arrange for a bad-weather backup space.
7. Know your own pace length (1 pace = 2 normal steps). What is that distance? What distance is 10 paces?
8. Make 16 directional signs (N, S, E, W, NE, NW, SE, SW, NNE, NNW, SSE, SSW, WSW, WSE, ESE, ESW).
9. Find large a photo of the Big Dipper, the Little Dipper and the North Star.
10. Learn how to use the compass from the directions found at the end of this activity plan (these are the instructions that came with the compass) and practice so that you can demonstrate how to use it.

Copy:

- Sign-in sheet (OMK Tech Discovery Tool Kit)
- Parent letter (1 per youth = 12 copies)
- "Find Your Way" Course Worksheet (found at the end of the activity plan; 1 per youth = 12 copies)
- "Create a Map" Worksheets (2) plus 2 pages of compass directions (found at the end of the activity plan, 4 pages total; 1 set of copies per youth = 12 sets of copies)

Get from OMK Tech Discovery Tool Kit:

- Laminated Life/Resilience Skill signs to hang from the bottom edges of the greeting table (Teamwork, Problem Solving, Self-responsibility, Emotional and Social objectives)
- Sign-in sheet
- Nametags
- Writing utensils
- 6 Silva Explorer® Compasses (directions for use found at the end of the activity plan)
- 6 tape measures

Buy or Borrow Supplies

Icebreaker: Silent Scramble

- Nametags for all youth, volunteers and anyone else who will be present (OMK Tech Discovery Tool Kit)
- Table for sign-in sheet
- Sign-in sheet (OMK Tech Discovery Tool Kit)
- Writing utensils (OMK Tech Discovery Tool Kit)

Activity 1: What Is a Compass?

- 16 directional signs (N, S, E, W, NE, NW, SE, SW, NNE, NNW, SSE, SSW, WSW, WSE, ESE, ESW)
- Large photo of the Big Dipper, the Little Dipper and the North Star

Activity 2: Pacing

- Tape measures (OMK Tech Discovery Tool Kit; 1 per team = 6 total)
- "Find Your Way" Course Worksheet (found at the end of the activity plan)
- Clipboards (1 per youth = 12 total)
- Writing utensils (OMK Tech Discovery Tool Kit)

Activity 3: Find Your Way Back

- 6 Silva Explorer® Compasses (OMK Tech Discovery Tool Kit; directions for use found at the end of the activity plan; 1 per team = 4 to 6 total)
- Place marker (i.e. wadded-up paper, shoe, ball, flag, treats; 1 per team = 4 to 6 total)
- "Find Your Way" Course Worksheet (found at the end of the activity plan)
- Clipboards (1 per youth = 12 total)
- Writing utensils (OMK Tech Discovery Tool Kit)
- 1 cow bell or something loud that can be heard outdoors to signal the return to their starting points

Activity 4: Create a Map

- 6 Silva Explorer® Compasses (OMK Tech Discovery Tool Kit; directions for use found at the end of the activity plan; 1 per team = 4 to 6 total)
- Place marker (i.e. wadded-up paper, shoe, ball, flag, treats; 3 per team = 12 to 18 total)
- "Create a Map" Worksheets (found at the end of the activity plan and copied as instructed)
- Clipboards (1 per youth = 12 total)
- Writing utensils (OMK Tech Discovery Tool Kit)

Day of the Event

Roles for Uniformed Service Member:

- Help youth identify and form a positive connection with another Service Member
- Encourage youth to ask questions about the Deployment Cycle
- Talk about the importance of knowing their surroundings and maps during deployment

Roles for Volunteers:

- Help youth with all activities and form a positive connection with the youth
- Provide positive support for youth throughout the activities
- Assist youth in setting positive goals
- Model problem-solving strategies
- Facilitate problem solving and use teamwork when youth become frustrated or have questions
- Watch all youth so that they are safe during the activity and don't wander into dangerous places like parking lots or streets
- Assist with setup and cleanup

Before the Youth Arrive….

1. Orient your group of volunteers to the activity (make sure they all have nametags and introduce themselves to each other before you get started.
2. **Activity Orientation for All Volunteers (**before the beginning of the event):
   - Review each activity
   - Cue volunteers where to look for the Life/Resilience Skill objectives in the directions and remind them of the importance of discussing them during the activity; remind them how these will help youth manage deployment and reintegration issues and adjustments
   - Have volunteers help set up for the event

Set up Your Space:

Space: You will need a large open space like the county fairgrounds, a ball field or park; also arrange for a bad-weather backup such as a large gymnasium.

1. Set up a greeting table with a sign-in sheet.
2. Tape **Life/Resilience Skill signs** around the edges of the greeting table.
3. Lay out or find 2 lines that are a known distance apart (30 to 50 feet). These will be used to help youth figure out the length of their own pace. Use lines on a ball diamond, football field, or lay out and measure lines yourself. Be sure to accurately measure the distance between the lines!

WHAT TO DO **Find Your Way**

As the Youth Arrive….

1. Have youth and accompanying adult fill out the sign-in sheet and have participant(s) put on a nametag.

2. Don't forget to introduce yourself and your team of volunteers, the Uniformed Service Member and others that might be present, along with their roles.

Icebreaker: **Silent Scramble (10 Minutes)**

1. Alphabetical (First Name) Order
   - Have players form a circle and, 1 by 1, say their first names only; then ask players to put themselves in alphabetical order without communicating verbally
2. Alphabetical (Middle Name) Order - *OPTIONAL*
   - Have players put themselves in alphabetical order by MIDDLE NAME without communicating verbally (or sharing name out loud)
3. Birthday Order
   - Have players put themselves in order in a circle based on their birthday (starting with January 1st) without communicating verbally; facilitator stands on January 1 with January 2 on his/her left and December 31 on his/her right

Debriefing Questions:

- What was necessary to put yourselves in order?
- How did you begin to know what to do?
- What non-verbal cues did you see from people when they were frustrated, when they thought something was wrong, or they were unsure of themselves? What did they look like?
- What specific role did you take in completing the task?

Adapted from: Great Group Games, Susan Ragsdale and Ann Saylor
(Book is located in the OMK Tech Discovery Tool Kit)

"This activity involved being observant, using teamwork and problem solving. You started and ended this activity in a circle. We're now going to be playing with compasses. The compass rose (face) is a circle and can help guide us no matter where we are or where we want to go.

"While we're here in a circle let's talk about the compass. What are the basic directions we'll use (north, south, east and west)? If I'm north on the circle, who is at the south position? Who is at east? West? Northeast? What else do you know about a compass?"

Activity 1: **What Is a Compass? (10 Minutes)**

"A compass is a handheld device that uses Earth's magnetic poles to help navigate and determine direction. A compass uses a magnetized pointer (such as a bar or needle) that lines up with the Earth's magnetic field. A compass is used to highlight direction by pointing north, south, east and west using the Earth's magnetic field.

"The compass was invented in China around 247 B.C., and has been used for navigation since at least the 11th century. A compass is used for land and sea navigation and has improved the safety and efficiency of travel throughout history. Today compasses are also used for recreational activity such as geocaching.

"Before the introduction of the compass, finding position, destination and direction at sea was primarily determined by the sighting of landmarks, along with the observation of the stars in the sky. Ancient sailors often kept within sight of land. The invention of the compass allowed travelers to navigate when the sky was overcast or foggy.

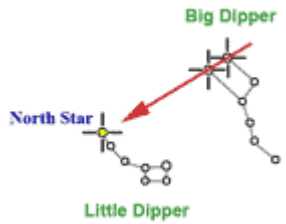
"A bearing is used to locate direction. It is used to travel to a destination or to locate your position. It is used to determine direction to some point – either on a map or in the real world.

"Let's see how well you know the directions found on a compass so we can get our bearings."

1. *"Let's all form a circle."* Pause while circle forms. *"Our circle now represents the face of a compass."*
2. *"On the table, there are 16 different directional signs that you would find on a compass. Go and choose 1 sign for yourself."*
3. *"The person who has the sign that reads **North** should stand anywhere they want."*
4. *"Look at where North is. Then think about where you belong on the circle, based on your directional sign. Move to your spot. As our new circle forms, we're recreating the face of a compass."*
5. *"What happens if we change the reference point from something other than North?"*
6. Have everyone find their place on the "compass" using SE as their reference point.
7. Continue with the following discussion about the North Star:

"Some people also use the sky to find their way. Finding the North Star helps people know which direction they are looking. Knowing how to find the North Star can be a challenge, so let's start by finding the Big Dipper. That's easy because it's so big and distinct. Remember that sometimes it's tipped in different directions depending on the time of the year.

"Look at the photo and find the 2 stars that form the outside edge of the 'cup' of the Big Dipper.



"Draw an imaginary line straight through the 2 stars of the dipper edge and toward the Little Dipper. The line will point very closely to the handle of the Little Dipper. The star in the Little Dipper at the end of its handle is the North Star.

"No matter what time of the night or what season, the North Star is the only star in the sky that doesn't appear to move."

Activity 2: **Pacing (20 Minutes)**

Learn About Pacing

1. *"To find your way with a compass, you need to know a few things about distance. For our activities we're going to use 'paces.' A pace is 2 steps."* (Demonstrate.)
2. *"I'll start walking with my left foot. Then I'll count every time my right foot hits the ground."*
3. *"Everybody line up on this line and we'll practice."* (Demonstrate using 1 of the lines you set up ahead of time, your base line.)
4. *"Now take 2 normal, comfortable steps forward and on the last step say '1.' That's 1 pace."*
5. *"Now count off 10 paces. Count every time your second foot hits the ground."*
6. *"Look what's happening to our line. Even though we each went the same number of paces, we each traveled a different distance because everybody's steps are different."*
7. *"What will happen if I tell somebody how many paces to go in a certain direction but my pace length is shorter than theirs?"*
8. *"To get a good measure of distance you each need to know how long your pace is so you can tell somebody exactly how far to go in feet."*

Discover Your Pace Length

1. Ask youth to form pairs.
2. Hand out the "Find Your Way" Course Worksheet and a writing utensil to each youth. Hand a tape measure to each pair.
3. One youth walks off 1 pace and the other youth measures it.
4. The second youth also walks 1 pace and the other youth measures it.
5. Now have each youth do 10 paces, measure the total distance and then divide by 10. That will give each youth an average distance per their individual pace.
6. Have each youth record their distance on the "Find Your Way" Course Worksheet.
7. Remember your own pace distance! You have already laid out a second line 30 to 50 feet (or some known distance) from your base line. Do not tell participants how far the new line is from the first.
8. Have youth line up on the base line. *"There is another line ahead of us. Everybody count your paces to the next line."*
9. Have youth write the number of paces they needed to take on their "Find Your Way" Course Worksheet.
10. Ask youth to multiply their pace length by the number of paces.
11. "*What distance did you come up with?"*
12. Tell them what the actual distance was.
13. *"Remember, paces are an estimation of distance so we'll all be a little off."*

Activity 3: **Find Your Way Back (10 Minutes)**

1. In a large open area, break the group into teams of 2 or 3.
2. Hand out a compass to each team.

3. *"Now we are going to learn about **RED IN THE SHED.** Place your compass so the baseplate is flat in your hand and the direction-of-travel arrow is pointing straight away from you. Turn your body until the compass points North."*
4. *"Now twist the outside dial so that your compass needle is in the RED SHED. This is your point of reference. Now you can walk in the direction of the bearing you are looking for."*
5. Walk around and demonstrate how this is done if youth are confused.
6. Before the teams go to their starting points, remind them to be safe; avoid parking lots/streets and other dangerous places.
7. Ring the cow bell or other device so they know that when they hear this sound it is time to return.
8. Scatter the teams around a large area so each team starts in a different place.
9. Teams should mark their starting point with a place marker (flag, ball, shoe, treats, etc.).
10. From their marker, teams should follow the directions given on the "Find Your Way" Course Worksheet.
11. If the team follows the directions correctly, they should end up back at their starting marker.
12. Start with Course #1 on the worksheet, and then do Course #2.

Activity 4: **Create a Map (40 Minutes)**

- *"This time, your team will create a map for another team to follow"*
- Hand out the "Create a Map" Worksheets
- Tell youth to follow the directions on the worksheets
- When youth have completed the activity, summarize as follows:

"Sometimes people give directions based on landmarks. ('Turn right at the end of the driveway, go to the 4-way stop and turn left. Look for the McDonalds and turn right.') Sometimes people give directions based on the compass and distances. ('At the end of the driveway, go north for a half mile. Turn west and go 3 blocks and turn north again.')

"Sometimes we lose direction and it has nothing to do with navigation tools. During deployment, you and your Service Member may feel a little lost. Think about how you can navigate these challenges in a positive and optimistic way. Find the navigation tools you need to pace yourself, find direction and help give direction to your Family and your Service Member.

"We've learned all sorts of approaches to finding our way in our world. Your Service Members are also using some of these tools as they are mobilized and working in their new environments. Think about how you can share your knowledge with them. Ask if they can share some of their personal maps with you so that neither of you ever feels lost or sad."

Talk It Over: **(20 Minutes)**

1. To help you focus the discussion, briefly look at Life Skill, Resilience Skill and Science and Technology Objectives on page 1.
2. Lead the entire group through the Talk It Over discussion.

3. Remember to include the Uniformed Service Member in the discussion.
4. Have a volunteer take comments/notes about group dynamics and specific youth comments.

Share/Reflect

- How do you like **giving** directions?
- How do you like **getting** directions?
- Which of the activities were the most fun? The most challenging?
- How did you respond to others' ways of giving and getting directions?
- Do you think it's a good idea to learn to follow directions? Why?
- How do you think your Service Member is using directions in the work they're doing during their deployment?
- Is it ever good to feel a loss of direction? Why? Why not? Do you have some new tools to help when this happens?

Process

- What did you learn in these activities that you didn't know before?
- What was easier, giving or following directions?
- How do you give directions to others? Do you use paces? Compass directions? Landmarks?
- Did the activities help you understand the process of giving and following directions better?

Generalize

- Did pacing help you understand your own sense of space? How?
- How do you know which type of directions to give others?
- Do you think it's a good idea to practice giving good directions? Why?
- How do you estimate distance?
- How is your "internal" compass? Do you feel like you usually know what direction you are going? Are you always right?
- Most of us don't use a compass to tell which way we're going. What else do we use?

Apply

- How can you feel positive about your direction?
- How can working in a team help you solve a situation where you lose your direction?
- If you've ever felt lost, how did you handle the situation? How did you become un-lost?
- What do you use in life to help you stay on course? What or who do you use as a life compass?
- If you can't find one of your usual compasses, what can you do? (talk about getting help from teachers, counselors or other adults)
- How can you help others move in positive directions?

Debrief Youth on Life/Resilience Skills:

Point to the Life/Resilience Skill signs that are posted around the room:
Teamwork, Problem Solving, Self-responsibility, Emotional and Social.
As you point to each sign, ask:

- How have our activities today helped you develop your _____ (skills)?
- Why do you think these skills are important?

Closing & Cleanup: **(10 Minutes)**

"Thanks for 'Finding Your Way' with us today! I hope you've met new friends, had fun and learned about ways you can 'find your way' in the world and in your life. We've also given you a chance to think about the ways to give and get directions. Mobilization is a challenging time. Think about ways you can work with your Family, Service Member and friends to find a direction and compass for yourself—ones that feel positive and constructive. Again, thanks for coming to this OMK Tech Discovery experience! Now it's time to 'leave no trace' and clean up. Whatever you used for place markers, run out and pick them up. If you can't find them, use your compasses!"

Extend the Activity:

- Try nighttime navigation

Post Event

Lead Volunteer:

- Check to make sure that the space is clean and returned to the arrangement it was in prior to your arrival
- Inventory and put all equipment and supplies back into their respective kits and pack them up to return as directed; make sure all iPad 2 devices, connecter kits, cords and power chargers are returned to the OMK Tech Discovery Tool Kit
- Fill out report:
  - Names of all volunteers
  - Number and names of youth (attach sign-in sheet)
  - Quotes from youth about activities
  - Other important notes on activities, volunteers and youth
  - Critical follow-ups (parents about behavior/worries about a particular youth, inappropriate language from a volunteer, etc.)
  - Indicate if there are videos, photos or other content that needs to be forwarded to youth/Family; make it clear which items go to each youth/Family

Activity Developed for OMK Tech Discovery by:
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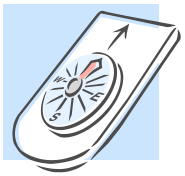
The OMK Tech Discovery Curriculum was developed at the University of Minnesota Extension Center for Youth Development through a partnership of the Department of Defense, Office of the Secretary of Defense, Military Community & Family Policy, Office of Family Policy/Children and Youth and the United States Department of Agriculture, National Institute of Food and Agriculture, Institute of Youth, Family and Community, 4-H National Headquarters under Kansas State University special project number 2010-48713-21882.

Find Your Way



Dear Family,

There are many ways to navigate. Today we learned how to use a compass, to take compass bearings and how to create a set of directions to give to others to help them find their way. This workshop involved a lot of teamwork and problem solving as well as consideration of the responsibility we have for carefully communicating a path for others to follow.

Of course navigation isn't just about the great outdoors. We also talked about navigating in life and how sometimes we find ourselves losing our direction, especially when Service Members are deployed. We talked about resiliency and staying positive and optimistic despite the challenges, as well as how to help each other as we navigate the deployment of our Service Member. In those cases, a magnetic compass is not much good and we need to rely on others to help us find our way. We also need to be ready to help others and by doing so, help ourselves.

We hope your youth had fun, made friends and will join us again in another OMK Tech Discovery experience during the deployment of your Service Member.

Thanks for helping your youth participate in this OMK Tech Discovery experience!

Best regards,

Conversation Starters:

- If you were stranded on a tropical island, what 5 things would you like to have? Why?
- Would you rather be lost at sea or on land? Why?
- Compass, GPS, Map or Binoculars: if you were in the wilderness, which 1 item would you choose?
- What is a good navigational tool to help you through this deployment?
- Who can help you map out solutions if you lose your way?

"Find Your Way" Course Worksheet

My Pace Length =

My Average Pace Length Is =

Paces and Length from 1 Line to Another =

Course #1: Simple (Cardinal Points Only)

Walk 5 paces to the North

Walk 10 paces to the West

Walk 20 paces to the South

Walk 15 paces to the East

Walk 15 paces to the North

Walk 5 paces to the West

Course #2: More Advanced (Using Bearings)

Take a bearing of 90 degrees

Walk 20 paces in that direction

Take a bearing of 225 degrees

Walk 28 paces in that direction

Take a bearing of 315 degrees

Walk 28 paces in that direction

Take a bearing of 45 degrees

Walk 28 paces in that direction

Take a bearing of 180 degrees

Walk 20 paces in that direction

"Create a Map" Worksheets

1. With your team, find a starting place. Mark that spot well or use a permanent object like a light pole or tree. From your starting point, agree on a compass bearing and a distance. At the end you will plant a marker for another team to find.

2. Write down the bearing and the distance in feet:
   a. Compass bearing to marker #1 = _____

   b. Distance to marker #1 (your paces _____ x your pace length _____ =

   _____ft)

3. Pace off the distance at that compass bearing.

4. Drop a marker at that spot.

5. From marker #1, do a different compass bearing and distance in feet. Write this information down:
   a. Compass bearing to marker #2 = _____

   b. Distance to marker #2 (your paces _____ x your pace length _____ =

   _____ft)

6. Pace off the distance at that compass bearing.

7. Drop a marker at that spot.

8. From marker #2, do another compass bearing and distance in feet. Write this information down:
   a. Compass bearing to marker #3 = _____

   b. Distance to marker #3 (your paces _____ x your pace length _____ =

   _____ft)

9. Pace off the distance at that compass bearing.

10. Drop a final marker.

11. Return to your group leader to trade maps with another group.

Reading Another Team's Map

How many of my paces are in the distances given by the other team?

To marker #1: _____ ft divided by _____(my pace length) = _____of my paces

To marker #2: _____ ft divided by _____(my pace length) = _____of my paces

To marker #3: _____ ft divided by _____(my pace length) = _____of my paces

If the map makers made good directions AND your team follows the directions well, you should be able to find your way to all 3 markers.

Use the maps and go get them!

Silva®
Guaranteed Accurate for Life

COMPASS INFORMATION FOR MOST MODELS
INFORMATIONS POUR LES BOUSSOLES POUR LA PLUPART DES MODELES

NOTE: Always check compass function prior to using it in the field.

Be aware that exposing your compass to articles with iron content (a magnetic field) can cause the red end of the needle to align with South, a condition called reverse polarity. Something as simple as being placed next to a pair of scissors or knife for a length of time, microwaves, high tension wires, stereo speakers, magnets, etc. can cause this problem.

Find Your Way Without a Map:

Find a heading (field bearing.)

1. Select a landmark along the route you want to travel. Hold the compass level and point the Direction of Travel Arrow at the landmark.
2. Find your heading to the landmark by turning the compass dial until the "N" aligns with the red end of the Needle. Read your heading in degrees at the Index Line.
3. Keep the Needle aligned with the "N"; look up; sight on your landmark and walk to it. Repeat this procedure until you reach your destination.

When you know your heading:

1. If you've been given a heading in degrees to travel, turn the Dial so that the heading is set at the Index Line. Hold the compass level in front of you with the Direction of Travel Arrow pointing straight ahead.
2. Turn your body until the red end of the Needle is aligned with the "N" on the dial. You now face your direction of travel.
3. Pick out a landmark in line with your heading and move toward it. Repeat this procedure until you reach your destination.

Find Your Way Back:

1. To return to your starting point, "backtrack" by pointing the Direction of Travel Arrow towards you and align the red end of the Needle with the "N" on the compass Dial.
2. Pick out a landmark on which to guide and move to it. Re-align Needle with the "N" on the Dial and select a new landmark. Repeat this procedure until you return to your origin.

Find Your Bearings with a Mirror:

1. Set the dial to the desired degree reading.
2. Without changing the dial, move the compass so that the orienting arrow lines up with the magnetic needle.
3. Hold the compass at eye level and adjust the cover to a 50°—70° opening. The mirror should reflect a top view of the compass dial. While looking in the mirror, move your sighting eye sideways until you see the sighting line intersect one of the two luminous points. Without changing the relationship between compass and eye, pivot yourself and compass together until you see, in the mirror, that the orienting arrow is lined up with the magnetic needle and the red end of needle is between the luminous points.
4. Your direction or objective will now lie straight beyond the sight.

NOTE: *Be sure to keep the base plate level so magnetic needle can turn freely. When sighting uphill or downhill, lower the sighting eye in relation to the compass.*

NOTE: *A greater than 70° cover opening will increase the parallax effect and could cause as much as a 5° reading error*

NOTE: *Should such need arise, the mirror feature also functions as a signaling device.*

Allow for Declination When Using a Map:

When the paralleling method of declination adjustment with pre-drawn Magnetic North lines is not available, the DECLINATION SCALE gives a fast, sure method for compensating for the difference between True North and Magnetic North.

1. Take your heading from the map by placing the Base Plate edge of the compass along your desired line of travel. The Direction of Travel Arrow points to your destination.
2. Turn the compass Dial so that the Orienting Arrow and Orienting Lines are parallel to the map side margins. Your Map Heading can be read at the Index Line on the Dial.
3. Hold the compass level, turn your body until the Compass Needle aligns with the Orienting Arrow. You are facing your Map Heading. Now turn yourself slightly until the Needle offsets against the DECLINATION SCALE to the appropriate degrees for your area. You now face your Magnetic Heading. Sight ahead to a landmark and walk to it. Repeat this process until you reach your destination.

Ignore Declination:

If declination is slight in your location; if you are not referencing a map or if accuracy is not critical; you may use the compass without declination allowance.

Find Your Exact Position:

1. To locate your position, choose two landmarks and find them on your map. Label them L1 and L2.
2. Point the Direction of Travel Arrow toward a landmark (L1) and rotate the compass Dial until the Red end of the Needle points to "N" on the dial. Read the heading at the Index Line.
3. Place the compass on your map with Base Plate edge touching the landmark (L1) and pivot it until the Orienting Arrow or Orienting Lines align with the Magnetic North lines. Draw a line from the landmark (L1) along the side of the Base Plate across the map.
4. Repeat this process with the second landmark (L2). Where the lines intersect is your location.

Notez: Vérifiez toujours le bon fonctionnement de la boussole avant de l'utiliser sur le terrain.

Ayez conscience que le fait d'exposer la boussole à des articles contenant du fer (un champ magnétique) peut faire que l'extrémité rouge de l'aiguille s'aligne sur le Sud, une situation appelée polarité inversée. Le problème peut avoir été causé par quelque chose d'aussi simple que le fait d'avoir rangé la boussole près d'une paire de ciseaux ou d'un couteau pendant un certain temps ou près d'un micro-ondes, de fils à haute tension, de haut-parleurs stéréo, d'aimants, etc.

Trouvez votre chemin sans carte :

Trouvez une direction (orientez-vous).

1. Choisissez un point de repère sur la route que vous voulez parcourir. Tenez la boussole plate et orientez la Flèche de Direction de Parcours dans la direction du point de repère.
2. Déterminez la direction vers votre point de repère en tournant le cadran de la boussole jusqu'à ce que le "N" soit sur la même ligne que l'extrémité rouge de l'Aiguille. Déterminez votre direction en degrés à la Ligne d'Orientation.
3. Gardez l'Aiguille alignée sur le "N". Relevez la tête et marchez vers votre point de repère.Répétez ce procédé jusqu'à ce que vous ayez atteint votre destination.

Si vous connaissez la direction.

1. Si la direction de votre route vous a été donnée en degré, tournez le cadran de manière à aligner la direction sur la Ligne d'Orientation. Tenez la boussole plate devant vous avec la Flèche de Direction de Parcours dirigée droit de vant vous.
2. Tournez vous jusqu'à ce que l'extrémité rouge de l'Aiguille soit alignée avec le "N" sur le cadran. La direction de votre parcours est maintenant devant vous.
3. Choisissez maintenant un point de repère droit devant vous et marchez vers lui. Répétez ce procédé jusqu'à ce que vous ayez atteint votre destination.

Trouver votre chemin de retour

1. Pour revenir à votre point de départ, "revenez sur vos pas" en dirigeant la Flèche de Direction du Parcours vers vous et alignez l'extrémité rouge de l'Aiguille avec le "N" sur le cadran de la boussole.
2. Choisissez un point de repère pour vous guider et marchez dans sa direction. Alignez de nouveau l'Aiguille sur le "N" et choisissez un nouveau point de repère. Recommencez ce procédé jusqu'à ce que vous soyez revenu à votre point de départ.

Trouvez votre orientation avec un miroir :

1. Ajustez le cadran aux degrés désirés.
2. Sans changer le cadran, tournez la boussole de manière à ce que les lignes de la Flèche d'Orientation soit sur la même ligne que l'Aiguille Aimantée et que l'extémité rouge de l'Aiguille se trouve entre les deux points lumineux.
3. Mettez la boussole au niveau de l'œil et ajustez le couvercle à une ouverture de 50° à 70°. Vous devriez voir la reflexion du dessus du cadran de la boussole. Tout en regardant dans le miroir, faites aller votre œil sur le côté jusqu'à ce que vous voyez que la ligne de visée coupe un des deux points lumineux. Sans changer la relation entre l'œil et la boussole, tournez vous ainsi que la boussole jusqu'à ce que vous voyez dans le miroir que la Flèche d'Orientation est sur la même ligne que l'Aiguille Aimantée.
4. Votre direction ou objectif se trouvera droit devant vous.

Notez : *Faites bien attention de garder la plaque de base horizontale pour que l'Aiguille Aimantée se déplace aisément. Si vous visez dans une montée ou une descente, baissez l'œil en relation avec la boussole.*

Notez : *Une ouverture du couvercle de plus de 70° augmentera l'effet de parallaxe et pourra causer une erreur de visée allant jusqu'à 5°.*

Notez : *En cas de nécessité le miroir pourra être employé comme dispositif de signalisation.*

Tenez en considération la déclinaison lorsque vous employez une carte :

Quand il n'y a pas de lignes du Nord Magnétique déjà tracées selon la méthode d'ajustement de la déclinaison , l'Echelle de Déclinaison fournit une méthode sûre et rapide pour compenser la différence entre le Nord Géographique et le Nord Magnétique.

1. Déterminez votre direction sur la carte en plaçant le côté de la Plaque de Base de la boussole le long de la ligne que vous désirez parcourir. La Flèche de Direction de Parcours pointe vers votre destination.
2. Tournez le Cadran de la boussole pour que la Flèche d'Orientation et les Lignes d'Orientation soient parallèles aux marges des côtés de la carte La Direction de votre Carte peut être déterminée à la Ligne d'Orientation sur le Cadran.
3. Tenez votre boussole plate. Tournez-vous jusqu'à ce que l'Aiguille de la Boussole soit sur la même ligne que la Flèche d'Orientaion. La direction de votre carte est droit devant vous. Tournez-vous maintenant un tout petit peu jussqu'à ce que l'Aiguille se déplace vers l'ECHELLE DE DECLINAISON aux degrés appropriés à votre région. Votre Direction Magnétique est maintenant droit devant vous. Décidez d'un point de repère et marchez dans sa direction. Répétez ce procédé jusqu'à ce que vous ayez atteint votre destination.

Ignorez la déclinaison :

Si la déclinaison est peu importante dans votre région; si vous ne faites pas le relèvement d'une carte ou si la précision n'est pas cruciale; vous pouvez employer une boussole sans tenir compte de la déclinaison.

Trouvez votre Position Exacte :

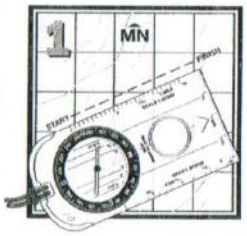
1. Pour déterminer votre position, choisissez deux points de repère et trouvez-les sur votre carte. Appelez-les L1 et L2.
2. Orientez la Flèche de Direction de Parcours vers le point de repère (L1) et tournez la boussole jusqu'à ce que l'extrémité rouge de l'Aiguille pointe vers "N" sur le Cadran. Relevez la direction sur la Ligne d'Orientation.
3. Placez la boussole sur votre carte de manière à ce que le côté de la Plaque de Base touche le point de repère (L1) et faites-la pivoter jusqu'à ce que la Flèche d'Orientation et les Lignes d'Orientation soient sur la même ligne que les lignes du Nord Magnétique. Tracez une ligne du point de repère (L1) le long du côté de la Plaque de Base à travers la carte.
4. Recommencez ce procédé avec le second point de repère (L2). Votre position se trouve là où les lignes se croisent.

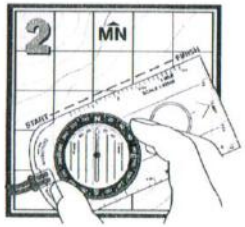
Find Your Way With a Map
The Silva System:

1. Place your compass on the area map with the Base Plate edge connecting where you are with where you want to go.

2. Set the compass heading by turning the]compass Dial until the "N" aligns with Magnetic North (MN) on the map.

3. Remove the compass from the map and] hold it level in front of you with the Direction of Travel Arrow pointing straight ahead. Turn your body until the red end of the Needle is directly over the Orienting Arrow, pointing to the "N" on the dial. The Direction of Travel Arrow now points precisely to your destination. Look up, sight on a landmark and walk to it. Repeat this procedure until you reach your destination.



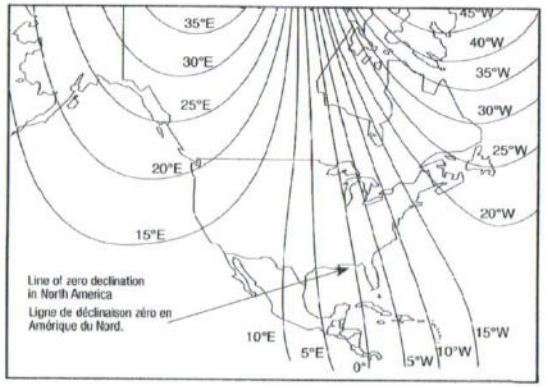


Trouvez votre chemin à l'aide d'une carte
Le système Silva :

1. Déposez votre boussole sur la carte de la] région en plaçant un côté de la Plaque de Base sur une ligne allant de votre point de départ à votre destination.

2. Ajustez la direction de la boussole en] tournant le Cadran jusqu'à ce que le "N" soit aligné avec le Nord Magnétique de la carte (MN).

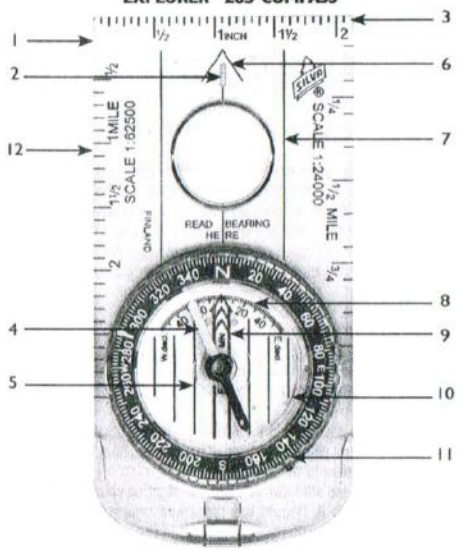
3. Prenez la boussole en main et tenez la plate en dirigeant la Flèche indiquant la Direction du Parcours droit devant vous. Tournez vous jusqu'à ce que l'extrémité rouge de l'aiguille soit directement sur la Flèche d'Orientation, dirigée vers le "N" sur le cadran. La Flèche de Direction du Parcours indique maintenant la direction de votre destination. Relevez la tête et trouvez un point de repère et marchez dans sa direction. Répétez ce procédé jusqu'à ce que vous ayez atteint votre destination.



The Magnetic Needle in a compass is attracted by the magnetism of the Earth and therefore always points to the constantly shifting Magnetic North. There is another "North Pole." True North is static and located geographically about 800 miles north of the magnetic pole. Maps and directions usually are based on True North. Magnetic declination is the angle between True North and Magnetic North. The amount of declination at any given point depends on the location of that point on the continent. Where True and Magnetic North are in the same direction, the declination is zero. At any point west of that line, your compass needle will point east of True North. This is called "Easterly Declination." At any point east of that zero line, your compass needle will point west of True North. This is called "Westerly Declination."

L'aiguille aimantée de la boussole est attirée par le magnétsme terrestre. Pour cette raison elle se tourne toujours vers le pôle magnétique nord qui varie constamment. Il y a un autre "Pôle Nord" Le Nord Géographique est statique et se trouve géographiquement à environ 800 miles (1.290 km) au nord du pôle magnétique. Les cartes et les directions sont généralement basées sur le Nord Géographique. La Déclinaison Magnétique est l'angle formé entre le Nord Géographique et le Nord Magnétique. Le degré de déclinaison à n'importe quel point dépend de l'emplacement de ce point sur le continent. Là où le Nord Magnétique et le Nord Géographique sont dans la même direction la déclinaison est zéro. Pour n'importe quel point à l'ouest de cette ligne, l'aiguille de votre boussole pointera vers l'est du Nord Géographique. Ceci s'appelle la "Déclinaison vers l'Est". Pour n'importe quel point à l'est de cette ligne zéro, l'aiguille de votre boussole pointera vers l'ouest du Nord Géographique. Ceci s'appelle la "Déclinaison vers l'Ouest".

EXPLORER® 203 COMPASS



1. BASE PLATE	1. PLAQUE DE BASE
2. LUMINOUS POINTS	2. POINTS LUMINEUX
3. RULER IN INCHES	3. ECHELLE EN POUCES
4. MAGNETIC NEEDLE WITH RED NORTH	4. AIGUILLE AIMANTEE AVEC NORD ROUGE
5. ORIENTING LINES	5. LIGNES D'ORIENTATION
6. DIRECTION OF TRAVEL ARROW	6. FLECHE DE DIRECTION DU PARCOURS
7. INDEX LINE	7. LIGNE D'ORIENTATION
8. DECLINATION SCALE	8. ECHELLE DE DECLINAISON
9. ORIENTING ARROW WITH RED NORTH	9. FLECHE D'ORIENTATION AVEC NORD ROUGE
10. LIQUID CAPSULE	10. CAPSULE DE LIQUIDE
11. DIAL WITH INCREMENTAL GRADATIONS	11. CADRAN GRADUE
12. USGS MAP SCALES	12. ECHELLE DE USGS

www.silvausa.com p/n 5794526B Rev. H 1.09

My Social Network 1: I Need My Privacy!

Time Needed: 2 hours
Skill Level: Basic
Number of Youth: 12
Deployment Segment: Mobilization
Internet Required: Yes

Life Skill Objectives:

- **Decision Making:** Explore social networking tools and make positive decisions related to Internet safety
- **Self-responsibility:** Take charge of decisions related to the appropriate use of social networking tools and learn about the potential impact that social media can have on your future
- **Communication:** Learn how to use social networking technology in a positive way to stay connected with your peers and Service Member during the deployment

Resilience Skill Objectives:

- **Social:** Develop and explore individual and community social connections using social networking tools to maintain trusted, valued relationships and friendships
- **Family:** Understand how Family communication and interactions change after deployment and how social networking tools can help maintain Family relationships
- **Spiritual:** Explore issues related to beliefs, principles and values in regards to Internet safety skills and what is and is not appropriate to share through social media

Science and Technology Objectives:

- Understand Internet safety and the technology skills needed to be safe when using social media

Activity Overview:

When you're on the Internet, being both social and safe can be tricky. Youth will explore online safety, profiles and etiquette as well as develop plans to stay connected with each other and their Service Member during deployment using social media.

Shout Out to Youth!

Stay safe and social with Facebook! Meet new friends and learn the latest ways to keep safe and in touch with the people you care about.

Prerequisites: None

Breakdown of Activities:

Icebreaker	Social Disease	(20 Minutes)
Activity 1:	Keeping It Clean	(45 Minutes)
Activity 2:	Facebook Family	(50 Minutes)
Closing & Cleanup		(5 Minutes)

Budget Range for Activity: $3/youth

Space Needed:
You will need a room with tables, chairs and an open space. Wireless Internet access is required.

Before the Event

Get Ready:

Tasks for Lead Volunteer

- Do Volunteer Training with the additional OMK Tech Discovery training (found at: http://www.4-hmilitarypartnerships.org/p.aspx?tabid=187)
- Review the activity, all materials and handouts

Do Ahead:

In coordination with the Military Point of Contact:

1. Schedule use of the OMK Tech Discovery Tool Kit. (If you anticipate a large group of youth, schedule additional OMK Tech Discovery Tool Kits. 1 Kit=12 youth.)
2. Schedule use of the Mobile Technology Lab.
3. Make sure you have wireless Internet access.
4. Schedule Uniformed Service Member and at least 1 volunteer per 6 youth to participate in the activity.
5. Schedule a Military Family Life Consultant (MFLC).
6. Borrow or buy supplies.
7. Contact volunteers and go through online training (to learn more about OMK and OMK Tech Discovery).
8. Recruit a Tech volunteer (for device, laptop and Internet support).

Copy:

- Sign-in sheet (OMK Tech Discovery Tool Kit)
- Parent letter (1 per youth = 12 copies)
- "How Safe Is Your Online Profile? – You Decide!" quiz worksheet (1 per youth = 12 copies; note that the worksheet is 2 pages long)

Get from OMK Tech Discovery Tool Kit:

- Laminated Life/Resilience Skill signs to post around the room (Decision Making, Self-responsibility, Communication, Social, Family and Spiritual objectives)
- 4 iPad 2 devices
- UV (ultraviolet) light (also called a black light)
- Timer
- Sign-in sheet
- Nametags
- Writing utensils

Get from Mobile Technology Lab:

- Wireless router with Internet connection
- Laptops
- LCD Projector
- Power strips

Buy or Borrow Supplies

Icebreaker: Social Disease

- Glo Germ Gel http://glogerm2.hostica.com/mm5/merchant.mvc?Screen=PROD&Store_Code=GG&Product_Code=GGG8O&Category_Code=PGAOL ($18.95 plus tax and shipping)
- Nametags for all youth, volunteers and anyone else who will be present (OMK Tech Discovery Tool Kit)
- Sign-in sheet (OMK Tech Discovery Tool Kit)
- UV (ultraviolet) light (also called a black light, available in the OMK Tech Discovery Tool Kit)
- Writing utensils (OMK Tech Discovery Tool Kit)

Activity 1: Keeping It Clean

- Timer (OMK Tech Discovery Tool Kit)
- Flip Chart
- Markers
- 4 iPad 2 devices (OMK Tech Discovery Tool Kit)
- Wireless router with Internet connection (Mobile Technology Lab)
- Laptops (Mobile Technology Lab)
- Power strips (Mobile Technology Lab)
- "How Safe Is Your Online Profile? – You Decide!" quiz worksheets (found at the end of the activity plan)
- Writing utensils (OMK Tech Discovery Tool Kit)

Activity 2: Facebook Family

- Sticky notes (at least 3 notes per youth)
- Flip chart
- Markers
- 4 iPad 2 devices (OMK Tech Discovery Tool Kit)
- Wireless router with Internet connection (Mobile Technology Lab)
- Laptops (Mobile Technology Lab)
- Power strips (Mobile Technology Lab)
- LCD projector (Mobile Technology Lab)
- Computer that works with LCD projector for demonstration purposes
- Writing utensils (OMK Tech Discovery Tool Kit)

Day of the Event

Roles for Uniformed Service Member:

- Help youth identify and form a positive connection with another Service Member
- Encourage youth to ask questions about the Deployment Cycle
- Talk about how you or others use social media to stay connected with other Service Members and Family while deployed

Roles for Volunteers:

- Help youth with all activities and form a positive connection with the youth
- Provide positive support for youth throughout the activities
- Assist youth in setting positive goals
- Assist with setup and cleanup

Before the Youth Arrive….

1. Orient your group of volunteers to the activity (make sure they all have nametags and introduce themselves to each other before you get started).
2. Have the Tech Volunteer show up early to set up the iPad 2 devices and the Mobile Technology Lab, ensure Internet access and set up a computer to work with the LCD projector for demonstration purposes.
3. **Activity Orientation for All Volunteers** (before the event begins)**:**
   - Review each activity
   - Cue volunteers about where to look for the Life/Resilience Skill questions in the directions; remind them of the importance of asking these questions during the activity and how these questions will help youth manage deployment issues and adjustments
   - Have volunteers help set up for the event

Set up Your Space:

Space: You will need a room with tables, chairs and an open space. Wireless Internet access is required.

1. Post **Life/Resilience Skill signs** around the room.
2. Set up a greeting table with a sign-in sheet.
3. Ensure there is wireless Internet access and set up enough laptops so that each youth has access to either a laptop or an iPad 2.

WHAT TO DO **My Social Network 1: I Need My Privacy!**

As the Youth Arrive….

1. Have youth and accompanying adult fill out the sign-in sheet and have participant(s) put on a nametag.
2. Don't forget to introduce yourself and your team of volunteers, the Uniformed Service Member and others that might be in the room, along with their roles.

Icebreaker: **Social Disease (20 Minutes)**

1. As the instructor you will need to sneak the Glo Germ Gel onto 2 participants' hands. You may just put a thick amount onto your hands and share a firm handshake with 2 youth to get the substance moving through the group. Once you have done this, wash your hands so you do not infect anyone else in the group.
   "For this icebreaker we'll demonstrate how people find each other on social networks. We'll also explore the dark side of social networking and look at how quickly negative influences can pass around a group."
2. "*To get to know one another today we're going to do a trust activity.* (Pause while youth groan.) *I know, I know, it sounds corny. But I promise if you play along you'll discover something new about social networking."*
3. Have everyone back up to the outside walls around the room.
4. Tell them to look around the room for obstacles they should avoid.
5. Tell them to listen to all the instructions and then you will begin the game. The instructions are:
   - The goal is to find "Sweetie"
   - They will do this by roaming around the room with their eyes closed, whispering "Are you Sweetie?" each time they bump into someone
   - If the person says, "Yes, I am Sweetie," the youth should keep their eyes closed and grab Sweetie by the arm; now both of them are Sweetie
   - If the person they bump into says, "No, I'm not Sweetie," youth should move to the next person and continue the search
   - Eventually everyone will find "Sweetie" and the youth will all be part of one big blob of people connected by linked arms or by touching one another
   - Ask them to close their eyes and place their bumpers up (demonstrate this by raising your hands in front of you in a protective position that would keep you from running into walls); encourage them to be respectful of one another's personal space and not to do this in an inappropriate manner
   - Instruct them to keep their eyes closed as best they can: *"No peeking!"*
6. To get the game started, say "*Go*."
7. Have youth walk around for 1 minute. Then you should go whisper into someone's ear, "You are now Sweetie." At this point, the blob will soon begin to grow.
8. When the entire group is in a blob, let them continue to wander around the room for another minute looking for all participants. Then tell them to FREEZE and open their eyes.
9. They should look around surprised at what has happened. Each individual will not be aware who is touching them, who they are locking arms with, or that the whole group is together.
10. Process the experience by asking youth the following questions:
    - Can you describe what happened?
    - How did you feel walking around the room with your eyes closed?
    - Was it uncomfortable searching for someone you didn't know, walking blindly around the room? Why?
    - How did it feel when you found "Sweetie" and joined the group?

11. Quickly have the participants introduce themselves to the group. This should be easy; they may want to tell stories of bumping into someone and laughing about the experience.
12. Next, ask youth:
    - How is this similar to social networking? (keep in mind how youth find each other on social networks by searching for friends and joining groups)
    - Is social networking a positive thing (a "Sweetie")?
    - Do social networks have a negative side?
13. Take the UV light out and shine it slowly and thoroughly on all the participants' hands, arms and shirts. You can also shine the light on the tables and furniture. You should find traces of the Glo Germ Gel on everyone and everything in the room. Now it is confession time. Tell them how you infected only 2 of them with this disease.

Debriefing Questions:

- How do you think the Glo Germ Gel infected all of you?
- What are the negative influences on social networks?
- How do they circulate?
- What parallels can you draw between this activity and social networks?
- How do these negative influences affect the environment? (just like the Glo Germ got on the furniture, these influences harm the social network system or environment)
- Have any of you experienced negative aspects of social networking? How?
- How could you apply this activity to an experience with your Service Member?

Give youth who are uncomfortable with having Glo Germ Gel on them time to clean up, but assure them it is harmless and will wear off.

Activity 1: **Keeping It Clean (45 Minutes)**

1. Hand out the iPad 2 devices so they are scattered around the room and discuss the **iPad 2 Rules and Regulations** (read the following out loud and then ask youth for examples of what NOT to do):
    - Handle with care
    - Use 2 hands at all times
    - Keep it clean
    - If you break it, you buy it ($500.00)
2. *"Does everyone have a Facebook account? Do you want 5 minutes to check it? I'll set the timer, but you have to promise that you'll stop when the timer goes off."*
3. Let youth use the laptops and iPad 2 devices to access their accounts. This is a good time to watch group dynamics, get the youth settled down and make sure all the connections on your LCD projector are working.
4. After the timer goes off, ask, *"How many times a day do you check your account?"* Have youth provide the numbers, write them down on a flip chart and determine an average amount (times a day accessed/group size). If time allows, you might also want to talk about how much time (minutes/hours) per week.

5. *"Now look towards me,* ***and without peeking****, how many of you can tell me where on your Facebook page you would find your privacy settings? Where would you find the profile that others see when they go to your page?"*
6. *"Does the answer surprise you? We'll come back to Facebook a bit later to find out, but now I want you to start thinking about the question, 'How do I use social networking?' Please no looking or using your laptop until you are directed."*
7. *"What other things do you do online?"* Write a list of things they do on a flip chart (post on social networking sites, chat with friends, create artwork and videos, watch movies, play video games, etc.). Look at the list and identify categories of use that pop out (online gaming will emerge).
8. *"Unlike adults who usually use the Internet to conduct transactions, youth more often use online activities that put them more at risk (entertainment), because they are connecting with others and sharing personal information through those connections. Let's look at how safe you are online."*
9. Hand out the "How Safe Is Your Online Profile – You Decide!" quiz. Give youth 10 minutes to do the quiz and have volunteers circulate to answer questions. Remind youth that they start with 55 points and add or subtract from there.
10. Now review the quiz with youth by reading each of the items out loud. As you read each item, provide personal stories or ask the youth for examples. This discussion helps provide a context for the next activity.
11. Explain that we will now discuss how the different actions youth take in the cyber world have real-world consequences that can affect them positively or negatively.

Activity 2: **Facebook Family (50 Minutes)**

"We all use Facebook and social networking, but how safe are you online? How can you protect your privacy and the privacy of your friends and Family on Facebook? Privacy settings are critical to safety and are always changing, so it's important, and it's your responsibility, to keep on top of your accounts.

"Remember when I asked you if you knew where on your Facebook page you would find your privacy settings? Where would you find the profile that others see when they go to your page? Can I have a volunteer who would be comfortable sharing their Facebook page with the group? We'll go through privacy settings together."

1. As the youth who volunteered logs onto the computer connected to the LCD projector (if no youth volunteers to share, ask one of the adult volunteers if they'd be willing to share), ask the group about the box below the login. *"Do you think you should check the box: 'Keep me logged in?'* (no) *Why? Why not?"*(it's a good habit to log out whenever you are not actively using a page)
2. *"What about 'Set as your homepage?'* (no) *Why? Why not?"* (explain that the home page needs to be discussed with an adult)
3. Now go through Facebook.
4. *"Where are the privacy settings found in Facebook?"* (The answer is the "Account" tab.)
5. Review each choice: Edit friends/Account settings/Privacy settings/Help center

6. Show and discuss the defaults. *"Are these good enough for you? How can you ensure your privacy?"*
7. Show and tell how you can edit privacy settings for your friends ("Limited Profile" function); talk about how this can be important for the safety of youth and Service Members. Encourage a discussion at this point with the Uniformed Service Member.
8. *"Who sees your profile?"* (Answers include friends, Family, parents, future significant others, employers, college admission officers, school principals, predators.)
9. *"Who is a friend online? How do you know?"*
10. *"What kinds of consequences, both positive and negative, could result from who sees your profile?"* (Answers include getting into trouble at school or with law enforcement, getting or losing a job, getting into college or not, identity theft, etc.)
11. *"Who has been bullied, or known someone who has been bullied online?"* Let youth share their experiences.
12. Talk about posted photos: *"Who owns them?"* (Answer is: you and Facebook do.) *"Who could download them?"* (Answer is: anyone.) *"How does that feel?"*
13. If there is time, give youth the opportunity to use Facebook and change their own settings. Have the Tech volunteer and others circulate around the room to answer questions. If things are running late, encourage them to look at their settings at home.

"'Being social' is definitely a part of our worldwide culture. Facebook is only one way we can be social, but it may not be the best way for this group to communicate with each other. What are some other ways we might want to keep in touch?"

1. Use the flip chart to record answers (email, Facebook, Skype, texting, cell phones, Google +, Foursquare, Google Groups, Twitter, Flickr, Wet Paint, fan page, etc.).
2. Hand out 3 sticky notes per youth.
3. Have youth vote for the 3 tools they would like to use to keep in touch with the group and then hand them back in.
4. Tally the votes to determine the winning methods.
5. Create a document/group/list serve, etc. so that the group can communicate (permission to share information was included on the sign-in sheet when youth/guardian signed in at the beginning of the event).
6. Move directly into the Talk It Over section.

Talk It Over:

1. To help you focus the discussion, briefly look at Life Skill, Resilience Skill and Science and Technology Objectives on page 1.
2. Lead the entire group through the Talk It Over discussion.
3. Remember to include the Uniformed Service Member in the discussion.
4. Have a volunteer take comments/notes about group dynamics and specific youth comments.

Share/Reflect

- What surprised you about social networking that you had never known before?
- How can you improve your online profile and safety?
- How did you feel when you realized that social networking can be both good and bad?

- What did you learn about yourself and how you use social networking?
- How can social networking help you stay connected with your peers and Service Member?

Process

- What choices can you make to make positive decisions related to Internet safety?
- What was the most challenging part of identifying account settings for your privacy?
- How was this process important or useful for you and your Service Member?
- What choices will you make to maintain trusted, valued relationships and friendships?

Generalize

- Why do we need to keep our Service Members informed of changes that are going on in our life?
- What potential impact can social media have on your future?
- Who is responsible for being safe online?
- How can you share your beliefs, principles and values in regards to Internet safety with others?
- What is and is not appropriate to share through social media?
- What communication skills did you learn today that may help you while your Service Member is deployed? And in the future?

Apply

- What did you learn about your own skills at using technology to stay in contact with others?
- How might you use social networking in your future? Or as a potential future career?
- How might Service Members use this technology in their work?
- What can you do to keep learning about using technology to communicate with others who are located far away?
- How can you keep learning about emerging technology in the future?

Debrief Youth on Life/Resilience Skills:

Point to the Life/Resilience Skill signs that are posted around the room:
Decision Making, Self-responsibility, Communication, Social, Family and Spiritual.
As you point to each sign, ask:

- How have our activities today helped you develop your _____ (skills)?
- Why do you think these skills are important?

Closing & Cleanup: **(5 Minutes)**

"Today we've explored how to use technology to stay connected with friends and Family. We've also helped you think about how to stay 'safe' in a 'social world.' We know that social networking tools are a part of your everyday life. We hope you use the decision-making skills and self-responsibility strategies shared today as you navigate the social networking world you live in. We also encourage you to share the knowledge and skills that you've gained with your friends, Family and Service Member. Before you leave, please help us clean up. Thank you for participating in our social networking activities and OMK Tech Discovery today."

Extend the Activity:

- Investigate cyber bullying and create a presentation to share with younger youth
- Create a YouTube video about how to use social networking to stay connected with your Service Member during deployment
- Draw a mind map (a way of visually illustrating your thought process) that represents all your "social networks"

Post Event

Lead Volunteer:

- Check to make sure that the space is clean and returned to the arrangement it was in prior to your arrival
- Inventory and put all equipment and supplies back into their respective kits and pack them up to return as directed; make sure all iPad 2 devices, connecter kits, cords and power chargers are returned to the OMK Tech Discovery Tool Kit
- Fill out report:
  - Names of all volunteers
  - Number and names of youth (attach sign-in sheet)
  - Quotes from youth about activities
  - Other important notes on activities, volunteers and youth
  - Critical follow-ups (parents about behavior/worries about a particular youth, inappropriate language from a volunteer, etc.)
  - Indicate if there are videos, photos or other content that needs to be forwarded to youth/Family; make it clear which items go to each youth/Family

Activity Developed for OMK Tech Discovery by:
Annie Lisowski, 4-H Youth Development Educator, University of Wisconsin-Extension
Wendy Rubinyi, Instructional Design Specialist (rubinyi.com)

The OMK Tech Discovery Curriculum was developed at the University of Minnesota Extension Center for Youth Development through a partnership of the Department of Defense, Office of the Secretary of Defense, Military Community & Family Policy, Office of Family Policy/Children and Youth and the United States Department of Agriculture, National Institute of Food and Agriculture, Institute of Youth, Family and Community, 4-H National Headquarters under Kansas State University special project number 2010-48713-21882.

My Social Network

Dear Family,

Today we had a social networking and safety workout! We discussed ways to keep our online profile clean and safe. We also discussed how social networking can be a great way to keep in touch with friends, Families and our Service Members. We had wonderful discussions about social networking and how the online tools we use have consequences, both positive and negative.

Ask your youth about the Glo Germ Gel and how it felt and what surprised them about it. Have them share what new things they learned about Internet safety. Encourage your youth to use social networking sites to interact with their Service Member. How can you help them communicate in a positive way? How can you encourage them to stay in touch with other Military youth they've met through this OMK program and others like it?

We hope that your youth had fun, learned new skills and made some friends today. Thanks for helping your youth participate in this OMK Tech Discovery experience!

Best regards,

Conversation Starters:

- What is your favorite social media tool? Why?
- What animal do you think is the most social?
- Why do you think people say mean things to each other?
- What school subject might be obsolete in 20 years?
- If you created an avatar, what would it look like? What is your avatar's name?

How Safe Is Your Online Profile? – You Decide!

All online actions have offline consequences. Your online image is an extension of your "real world" persona. Take this quiz to help you decide if you are revealing too much online.
Give yourself 55 points to start. Add or subtract points as you answer each question.

	Yes	No	Your Score 55
Is your online profile set to private?	+2	-2	
Are you friends/buddies with people you first met online?	-2	+2	
Is your friend/buddy list larger than 100 people?	-1	+1	
Does your online profile contain a photo of you?	-1	+1	
Are there inappropriate photos, videos or graphics posted on your profile?	-3	+3	
Are you friends/buddies with anyone who posts inappropriate photos, videos or graphics on their profiles?	-1	+1	
Are you a member of more than 3 groups, fan pages or networks?	-1	+1	
Does your online profile include any direct personal information like your real name, email, phone number or school?	-5	+5	
Does your online profile include any indirect personal information like your favorite things, names of Family members or school mascot?	-3	+3	
Are you a member of a group or network that is larger than 100 people?	-1	+1	
Does your online profile contain links to inappropriate websites?	-2	+2	
Are you a member of a group or network that could be considered inappropriate?	-1	+1	
Does your online profile include any posts or notes that share personal information or discuss inappropriate topics?	-1	+1	
Does your online profile contain any swearing or bigoted slang words?	-2	+2	
Do you have posts about or references to alcohol, drugs or sex on your online profile?	-3	+3	

Are you friends/buddies with people who post about alcohol, drugs or sex on their online profiles?	-2	+2	
Would you consider your online profile professional?	+1	-1	
Does your online profile contain photos or videos that provide direct or indirect personal information about you?	-2	+2	
Does your online profile contain any quotes or information that tells something about how you behave or feel which might make you vulnerable to predators?	-2	+2	
Do you post any mean or rude comments about others on your profile?	-2	+2	
Do you blog (keep journal entries) on your online profile?	-2	+2	
Does your online profile include any violations of intellectual property rights like plagiarism or free music downloads?	-1	+1	
Are you friends/buddies with anyone who posts mean or rude comments about others on their profile?	-1	+1	
Does your online profile contain any of your own artwork that is either inappropriate or reveals something about you that makes you vulnerable to others?	-1	+1	
Is there evidence of cyber bullying on your online profile?	-3	+3	
Would you be willing to print off your online profile and post it on your locker?	+2	-2	
If your online profile was printed on the front page of the local newspaper would you be embarrassed?	-2	+2	
If a parent or teacher saw your online profile would their opinion of you decrease?	-2	+2	
Does your gut tell you that your online profile reveals too much?	-3	+3	
		Final Score:	

SCORING:

110 Points: Top score – give yourself a reward for creating a safe online profile!

90-109 Points: Not bad, but pay attention online!

50-89 Points: It could be worse, but you better clean up your online profile!

1-49 Points: Yowza, it's time you revise your online profile. Start from scratch?

0 Points: Worst score – you're not responsible enough for an online profile.

My Social Network 2: Talk to Me!

Time Needed: 2 hours
Skill Level: Basic
Number of Youth: 12
Deployment Segment: Mobilization
Internet Required: Yes

Life Skill Objectives:

- **Decision Making:** Before using real-time interactive streaming Internet tools, think ahead and make choices about what and how to share information with a Service Member
- **Self-responsibility:** Take responsibility for interactions with a Service Member so that they are productive even when topics are challenging or negative
- **Communication:** Focus on using real-time interactive streaming Internet tools to build positive communications that will help your Service Member and Family communicate effectively during the deployment

Resilience Skill Objectives:

- **Emotional:** Practice identifying emotions as they happen during real-time streaming Internet interactions and find opportunities to manage negative emotions productively while cultivating positive emotions
- **Social:** Strengthen connections with Service Members by learning how to identify your own and others' emotions
- **Family:** Understand how Family communication and interactions change after deployment and how Internet networking tools can help maintain positive Family relationships
- **Spiritual:** Develop a sense of purpose, meaning and strength to persevere and prevail when faced with significant challenges and responsibilities

Science and Technology Objectives:

- Understand how real-time interactive streaming Internet tools work and learn how to use video calls to effectively communicate with your Service Member and others in your Social Network

Activity Overview:
Learn how to use video chat effectively to have positive live interactive Internet conversations and video calls with your Service Member.

Shout Out to Youth!
Fire up your computers for a video call! Bring your ID and password for your favorite video chat app and learn tips and tricks for positive video conversations with friends and Family.

Prerequisites: None

Breakdown of Activities:

Icebreaker	Act/React	(20 Minutes)
Activity 1:	Let's Face It	(25 Minutes)
Activity 2:	Read My Face	(15 Minutes)
Activity 3:	Talk to Me!	(40 Minutes)
Talk It Over		(15 Minutes)
Closing & Cleanup		(5 Minutes)

Budget Range for Activity: $2/youth

Space Needed:
Two rooms, tables, chairs and open space. Wireless Internet access (for both rooms) is required to do this activity.

Before the Event

Get Ready:

Tasks for Lead Volunteer

- Do Volunteer Training with the additional OMK Tech Discovery training (found at: http://www.4-hmilitarypartnerships.org/p.aspx?tabid=187)
- Review the activity, all materials and handouts

Do Ahead:

In coordination with the Military Point of Contact:

1. Schedule use of **2** OMK Tech Discovery Tool Kits. (1 Kit=6 youth.)
2. Schedule use of Mobile Technology Lab for wireless Internet access and laptops.
3. Schedule Uniformed Service Member and at least 1 volunteer per 6 youth to participate in the activity.
4. Schedule a Military Family Life Consultant (MFLC).
5. Get the OMK Tech Discovery email addresses so that youth who do not come to the activity with an email/video chat account can still do the activity.
6. Borrow or buy supplies.
7. Contact volunteers and go through online training (to learn more about OMK and OMK Tech Discovery).
8. Recruit a Tech volunteer (for device, laptop and Internet support).
9. Sign up for 3 different free video chat services, so that you can become familiar with how they work and can give a brief demonstration on how to use them.

Copy:

- Sign-in sheet (OMK Tech Discovery Tool Kit)
- Parent letter (1 per youth = 12 copies)
- "Video Chat Ideas" handout (found at the end of this activity plan, 1 per youth = 12 copies to go home with parent letter)
- "Video Chat Skills Evaluation" handout (found at the end of this activity plan, 3 copies per youth; 2 copies will be used during Activity 3 and 1 copy will go home with parent letter and "Video Chat Ideas" handout)

Get from OMK Tech Discovery Tool Kits:

- Laminated Life/Resilience Skill signs to post around the room (Decision Making, Self-responsibility, Communication, Emotional, Social, Family and Spiritual objectives)
- 8 iPad 2 devices
- Timer
- Sign-in sheet
- Nametags
- Writing utensils
- Paper

Get from Mobile Technology Lab:

- Wireless router with Internet connection
- 5 laptops
- 5 web cams if not integrated into the laptops
- LCD projector
- Power strips

Buy or Borrow Supplies

Icebreaker: Act/React

- Nametags for all youth, volunteers and anyone else who will be present (OMK Tech Discovery Tool Kit)
- Table for sign-in sheet
- Sign-in sheet (OMK Tech Discovery Tool Kit)
- Slips of paper
- Writing utensils (OMK Tech Discovery Tool Kit)
- A fun hat
- Timer (OMK Tech Discovery Tool Kit)
- Flip chart (with instructions printed out in advance as noted)
- Markers

Activity 1: Let's Face It

- Flip chart
- Markers
- Timer (OMK Tech Discovery Tool Kit)

Activity 2: Read My Face

- 8 iPad 2 devices (OMK Tech Discovery Tool Kits)
- Wireless router with Internet connection (Mobile Technology Lab)
- 4 laptops (Mobile Technology Lab)
- Power strips (Mobile Technology Lab)

Activity 3: Talk to Me!

- Flip chart
- Markers
- Paper (OMK Tech Discovery Tool Kit)
- Writing utensils (OMK Tech Discovery Tool Kit)
- 8 iPad 2 devices (OMK Tech Discovery Tool Kits)
- 5 laptops (Mobile Technology Lab)
- 5 web cams if not integrated into the laptops (Mobile Technology Lab)
- Wireless router with Internet connection (Mobile Technology Lab)
- Power strips (Mobile Technology Lab)
- LCD projector (Mobile Technology Lab)
- "Video Chat Skills Evaluation" handout (found at the end of this activity plan and copied as instructed; 2 copies per youth for this activity)

Day of the Event

Roles for Uniformed Service Member:

- Help youth identify and form a positive connection with another Service Member
- Encourage youth to ask questions about the Deployment Cycle
- Talk about how you or others use video chat to stay connected with other Service Members and Family while deployed

Roles for Volunteers:

- Have Tech volunteer show up early to ensure Internet access and to set up
- Help youth with all activities and form a positive connection with the youth
- Provide positive support for youth throughout the activities
- Assist youth in setting positive goals
- Assist with setup and cleanup

Before the Youth Arrive….

1. Orient your group of volunteers to the activity(make sure they all have nametags and introduce themselves to each other before you get started).
2. Have Tech volunteer ensure Internet access in both rooms and set up the LCD projector so that it works with a laptop for demonstration purposes.
3. **Activity Orientation for All Volunteers** (before the event begins)**:**
    - Review each activity
    - Cue volunteers where to look for the Life/Resilience Skill objectives in the directions and remind them of the importance of discussing them during the activity; remind them how these will help youth manage deployment issues and adjustments
    - Have volunteers help set up for the event

Set up Your Space:

Space: Two rooms, tables, chairs and open space. Wireless Internet access (for both rooms) is required to do this activity.

1. Post **Life/Resilience Skill signs** around the room.
2. Set up a greeting table with a sign-in sheet.
3. Ensure there is wireless Internet access for the laptops and the iPad 2 devices.
4. Write the directions for the Icebreaker: Act/React activity on the flip chart (see below).

WHAT TO DO **My Social Network 2: Talk to Me!**

As the Youth Arrive….

- Have youth and accompanying adult fill out the sign-in sheet and have participant(s) put on a nametag
- Don't forget to introduce yourself and your team of volunteers, the Uniformed Service Member and others that might be in the room, along with their roles

Icebreaker: **Act/React (20 Minutes)**

Act/React is an icebreaker where youth choose an event that would cause an emotional reaction and other youth try to guess what that event is by the expressions and gestures of the youth acting out the event. It can be done individually or as a team of 2 (this decision can be made once you get a feel for the group and their ages).

1. As the youth enter the room, hand them a writing utensil and slips of paper. Point out the directions on the flip chart. [**Directions:** List examples of events that you've experienced in the last month where you've had an emotional response: you won an important game, you fell in love, you fought with a friend, you ate your favorite food, you played with the dog…].
2. Youth write event(s) that they have experienced in the last month on their slips of paper. One event per slip. Try to guide them that it should be a more universal event. They can write down as many as they want, but at least 1.
3. Put all the events into a hat.
4. You can do this activity in teams or individually. Each youth or team picks an event out of the hat when it is their turn.
5. Before they get started with "act/react" have youth state their name, say where they are from and show their favorite dance move. (This should get them warmed up and get the embarrassment out of the way.)
6. Youth must then "react" to the event using animated expressions, pantomimes and gestures. No talking allowed, but noises are okay. ("Charade" might be a word they could relate to if they are having trouble.)
7. Each youth is given 1 minute to react and then other youth try to guess what happened that caused those reactions and actions. The youth who is reacting can expound and use gestures as the answers get closer or further from the actual event they are responding too. Use the timer in the OMK Tech Discovery Tool Kit to limit each turn so that everyone has a chance to "react."
8. Encourage all the youth to shout out answers. Try to guide them so that it does not get too chaotic, but let them get a bit silly.

Debriefing Questions:

- What was the most challenging part of doing this activity? Why?
- How did using non-verbal communication help you? How did it confuse you?
- If you could have added words, what would you have changed about your non-verbal communication? Would it have made it easier or harder? Why?
- How did body language help you figure out the event each person was reacting to?
- How would this activity change if all you saw were faces?

Activity 1: **Let's Face It! (25 Minutes)**

"You know how hard it is to hide your emotions, especially if you're upset, angry or sad? It's critical that you share what's going on in your life, even the tough stuff, with your Service Member and your Family, but it can be hard to do. Hard for you to share, and hard for your Service Member to know that you're facing these things while they aren't there to help.

"So how do you talk about the hard stuff? Adding words adds a whole new dimension to our Icebreaker activity. Here are some strategies that can help with tough conversations:

- *Try to say something positive before you talk about hard topics. Negative topics usually take up most of our attention, but sometimes that means we forget to notice the good stuff that is happening too.*
- *Don't force yourself to be happy—you know it will show in your face. But try to take a productive approach to the negatives. How are you problem-solving? Who has offered you help or a hug? When something like this happened in the past, how did you work through it?*
- *Take a deep breath or count to 5 before you say something negative.*

"We're going to break up into groups of 3. Each group will have a piece of flip chart paper. I'll read off a situation, then I want you to brainstorm and write down your ideas. Together, come up with ways to talk about that problem with your Service Member. How could you show your Service Member that you're trying to take a positive approach to working through that particular tough situation?"

1. Present 1 emotional situation at a time.
2. Set the timer for 3 minutes for each situation.
3. Some sample situations are listed here. You can also create your own or add other relevant topics (deployment, money or other things you've heard the youth/parents/volunteers talk about). Or use the slips that are left over from the Icebreaker activity. Sample situations include:
    - I'm having a tough time because my best friend and I are fighting
    - My math teacher keeps giving me a bad time
    - The cat got run over by a car
    - My cell phone was stolen
    - Nobody listens to what I'm saying
    - I can't deal with my little sister
    - I miss you
4. Ask a couple of the groups if they would like to share their responses.

"Remember, tough things happen and you want to share, but it's going to be difficult for your Service Member to hear that you're struggling. Thinking ahead about the conversation will really help it go better for both of you."

Debriefing Questions:

- Did it help to brainstorm with others about how to talk with your Service Member about tough stuff? How?
- The next time you need to talk about something difficult with your Service Member, do you think it would help to brainstorm in advance with a friend or Family member?
- What other strategies can you use if a conversation gets "tough"? (deep breath, count to 5)
- Why is talking about tough topics in a positive way important to your Service Member? To you?

Activity 2: **Read My Face (15 Minutes)**

"Nonverbal communication is as powerful as words. When you are on a video chat with your Family or friends, your facial expressions and body language can tell 1 story, while your words tell another story. This can be very confusing and many times we aren't even aware of what we're doing! Now let's focus on the face. Let's see how good we are at reading faces."

1. Hand out the iPad 2 devices. If you have more than 8 youth, some of them will need to use laptops.
2. **Review iPad 2 Rules and Regulations** (read the following out loud and ask youth for examples of what NOT to do):
   - Handle with care
   - Use two hands at all times
   - Keep it clean
   - You break it, you buy it ($500.00)
3. Open Safari browser and search for youramazingbrain.com found at http://www.youramazingbrain.org/testyourself/default.htm#.
4. Choose "Test Yourself."
5. Now take the "Reading Faces" test.

Debriefing Questions:

- How did you do? Were you surprised?
- What would happen to those facial expressions if you made it a video clip instead of a pictured image?
- Do you think we can control our facial expressions?
- Have you ever watched a video of yourself doing something you liked to do? What about something you felt uncomfortable doing? Could you tell by seeing your face?

Activity 3: **Talk to Me! (40 Minutes)**

"There are many different applications that you can use to video chat with Family and friends. These apps include FaceTime, Skype, Vtok, VZOchat, ooVoo and TokBox, with many more free services that help you video chat with different features. Depending on your branch of service and access you may even have a dedicated video chat function.

"Video chat is an exciting and powerful technology, but as with all forms of communicating, you have to think before you do. A Family member who is deployed has a job to do. While it is essential that they feel connected with events going on at home, it sometimes can be hard for them to hear about all the things that they are missing.

"In addition, they see your facial expressions and non-verbal communications as well as hear the words and tones of your voice. It can be hard on both ends of the video chat to keep conversations positive and natural so that you can be supportive and your Service Member doesn't worry or feel too sad about not being there with you.
"How can we do this? First we should think ahead:

1. *"What are some neutral topics you could talk about with your Service Member?"*

2. Hand out paper and writing utensils and encourage youth to take notes or write a list of specific topics that are neutral for their Families.
3. Use a flip chart and work with the group to brainstorm. Here are some common topics:
    - Pets
    - Music
    - Books you are reading
    - Music you like
    - Sports teams
    - Weather
    - TV
    - Movies
    - Shared hobbies
    - Food
    - General school stuff (classes you are taking)
    - Classes you like
4. *"Since you have the opportunity to use live video you can also do a 'show and tell.'"*
5. Use another page on the flip chart to brainstorm some show-and-tell items:
    - New clothes
    - Artwork
    - Walk around the house and show a clean room
    - Sing a goofy song or rap
    - Show how you do something or demonstrate a new skill
6. Use a laptop and the LCD projector to show youth a few video chat services. You will probably not have time to demonstrate each, but they will get a flavor of what they look like. This should be brief.
7. Show youth where the webcams are located on the iPad 2 devices (front and back) so that they do not unintentionally block the lenses during their video chats.
8. *"Now let's practice!"*
9. Try to match up each youth with another youth that uses the same video chat service (Skype, FaceTime, etc.).
10. Have them share their contacts while they are in the same room so that you can help them if they are having trouble.
11. Hand out 2 copies of the "Video Chat Skills Evaluation" to each youth.
12. *"When I'm finished talking, each 2-person team will split apart into separate rooms and have a 3-minute video chat. Bring your notes on neutral topics. Think about which of these topics you want to talk about with your team partner and choose 1 to start with."*
13. *"After you finish your video chat, fill out the 'Video Chat Skills Evaluation' handouts. Fill out 1 for your partner and 1 for yourself."*
14. Have teams split into separate rooms and ask volunteers to be available if youth are having problems with the technology.
15. Give youth a reminder to fill out their evaluations after they have talked for a few minutes.
16. Have youth return to the first room.
17. Tell youth not to share the evaluations until they are told to do so.

18. *"So how do you think you did?"* Have youth talk about their self-evaluation.
19. *"Now let's look at what someone else noticed about the conversation."* Have youth sit and talk as teams about their observations. Prompt youth to think about the differences in how they evaluated themselves versus what their partner observed.

Talk It Over: **(15 Minutes)**

1. To help you focus the discussion, briefly look at Life Skill, Resilience Skill and Science and Technology Objectives on page 1.
2. Lead the entire group through the Talk It Over discussion.
3. Remember to include the Uniformed Service Member in the discussion.
4. Have a volunteer take comments/notes about group dynamics and specific youth comments.

Share/Reflect

- What did you learn about using video chat that you had never known before?
- How did you feel when you evaluated your video chat skills? Did that change after you looked at your video chat partner's evaluation? How?
- Do you think that you will be better at video chatting after doing the activities today?
- What did you learn about yourself by doing these activities?
- How can video chatting help you stay connected and positive with your peers and Service Member?
- If you experienced any technical difficulties how did you troubleshoot the problem? How did that feel?

Process

- How can you make positive choices about the topics you discuss during a video chat?
- What was the most challenging part of identifying variables that could make a video chat positive?
- How was this process important or useful for you and your Service Member?
- What choices will you make when you are able to video chat with your Service Member?
- Was the technology in the video chat transparent or was the process/program difficult? Why?

Generalize

- Why do we need to keep our Service Members informed of changes that are going on in our life?
- What potential impact can video chat have on your future?
- What is and is not appropriate to share through video chat?
- What communication skills did you learn today that may help you while your Service Member is deployed? And in the future?

Apply

- What did you learn about your own skills at using technology to stay in contact with others?
- How might you use video chats in your future? Or as a potential future career?
- How might Service Members use this technology in their work?

- What can you do to keep learning about using technology to communicate with others who are located far away?
- How can you keep learning about emerging technology in the future?

Debrief Youth on Life/Resilience Skills:

Point to the Life/Resilience Skill signs that are posted around the room:
Decision Making, Self-responsibility, Communication, Emotional, Social, Family and Spiritual.
As you point to each sign, ask:

- How have our activities today helped you develop your _____ (skills)?
- Why do you think these skills are important?

Closing & Cleanup: **(5 Minutes)**

1. *"Video chatting is a great way to stay in touch with Family, friends and your Service Member. Share the information you learned today with others who are video chatting with a Service Member and see if they find it useful too. Be sure to exchange video chat account information with your new friends if you want to continue to chat about the experiences you have while your Service Member is deployed. We hope you learned some new skills today so that you can have fun using this wonderful free resource! Now, please lend a hand to clean up any mess in the rooms."*
2. Hand out the parent letter, the "Video Chat Ideas" handout and an additional copy of the "Video Chat Skills Evaluation" handout to each youth.

Extend the Activity:

- Try video chatting with a group of friends or Family at multiple locations using some of the free services like Skype or GroupMe
- Perform a live video chat improvisational cabaret that showcases a new Family talent each week
- Invite special "guest stars" to appear on your next video chat and do an interview of your guest (Grandma, friend, your pet dog)

Post Event

Lead Volunteer:

- Check to make sure that the space is clean and returned to the arrangement it was in prior to your arrival
- Inventory and put all equipment and supplies back into their respective kits and pack them up to return as directed; make sure all iPad 2 devices, connecter kits, cords and power chargers are returned to the OMK Tech Discovery Tool Kit
- Fill out report:
  - Names of all volunteers
  - Number and names of youth (attach sign-in sheet)
  - Quotes from youth about activities
  - Other important notes on activities, volunteers and youth
  - Critical follow-ups (parents about behavior/worries about a particular youth, inappropriate language from a volunteer, etc.)
  - Indicate if there are videos, photos or other content that needs to be forwarded to youth/Family; make it clear which items go to each youth/Family

Activity Developed for OMK Tech Discovery by:
Wendy Rubinyi, Instructional Design Specialist (rubinyi.com)

The OMK Tech Discovery Curriculum was developed at the University of Minnesota Extension Center for Youth Development through a partnership of the Department of Defense, Office of the Secretary of Defense, Military Community & Family Policy, Office of Family Policy/Children and Youth and the United States Department of Agriculture, National Institute of Food and Agriculture, Institute of Youth, Family and Community, 4-H National Headquarters under Kansas State University special project number 2010-48713-21882.

My Social Network 2: Talk to Me!

Dear Family,

Video chat is a powerful tool to keep in touch with Family and friends as well as your Service Member while they are deployed. Live video chatting can be tricky, however, especially with youth. Everyone misses each other and it is important that conversations focus on positive outcomes even when talking about the "tough stuff." Your Service Member has an important job to do and if they are too worried about what is happening at home or feel sad about missing too many important events, it can be distracting to them as they perform their important service to our country.

Today, your youth thought about their reactions to different important events in their lives. They took a quiz on how well they read faces and brainstormed topics that they can use during a video chat. Then they talked about the "hard" stuff and brainstormed ideas with other youth on ways to be productive and not destructive when talking about hard issues.

Then, each youth practiced video chatting with another youth using the skills and ideas they learned. They evaluated themselves and their partner. Ask them if there were any differences in how they felt they did versus what their partner observed.

Your youth has several resources they are coming home with today. Feel free to use the evaluation to practice with your youth so that interactions during video chats can stay positive and productive and the Video Chat Ideas worksheet to help during your next video chat with your Service Member.

We hope that your youth had fun, learned new skills and made some friends today. Thanks for helping your youth participate in this OMK Tech Discovery experience!

Best regards,

Conversation Starters:

- What is your favorite reality TV show? Why?
- Who is your favorite TV character?
- What is your best facial feature? Why?
- If you could change your hair, what would you do?
- What is easier for you to do: draw, sing or dance?

Talk to Me!
Video Chat Skills Evaluation

Yourself/Partner (Circle who you are evaluating)

Skills	**Excellent**	**Good**	**Needs Improvement**	**Examples**
Eye contact				
Facial expression				
Body language				
Hand gestures				
Voice: Pitch Volume Speed Tone				
Energy & enthusiasm				
Neutral topics				
Use of camera				
Use of sound				
Use of video chat to show examples				
Overall use of video chat technology				

Talk to Me!
Video Chat Ideas

Topic Ideas:

- Weather
- Pets
- Music
- Books you are reading
- Music you like
- Sports teams
- TV
- Movies
- Shared hobbies
- Food
- General school stuff (classes you're taking)
- Classes you like

Add Your Own Ideas Here:

Show and Tell Ideas:

- New clothes
- Artwork
- Walk around the house and show a clean room
- Sing a goofy song or rap
- Show how you do something or a new skill
- Show your dog doing a trick
- Perform a "show" with songs or magic or write a skit

Add Your Own Ideas Here:

My World – My Direction!

Time Needed: 4 hours
Skill Level: Basic
Number of Youth: 12
Deployment Segment: Mobilization
Internet Required: Yes

Life Skill Objectives:

- **Communication:** Develop skills in sharing experiences and feelings with others to better understand the world we live in
- **Teamwork:** Work together to discover geocaches and learn more about being a good team member in your own world
- **Problem Solving:** Work with others to discover geocaches while solving problems and conflicts and using communication skills

Resilience Skill Objectives:

- **Emotional:** Approach challenges in a positive and optimistic way and understand the environment faced by your Service Member
- **Social:** Respond to others' environments with authentic, active and constructive interest
- **Family:** Understand the different communication styles people use when resolving conflicts and problems
- **Spiritual:** Look for and appreciate the positive things that can happen

Science and Technology Objectives:

- Understand the basic components of a Global Positioning System (GPS)

Activity Overview:
Youth will learn to think spatially by understanding place locations as well as learning about the basic components and limitations associated with GPS.

Shout Out to Youth!
Go on a treasure hunt with a GPS. Try geocaching—the search is on!

Prerequisites: None

Breakdown of Activities:

Icebreaker	Oh, the Places We Have Been!	(20 Minutes)
Activity 1:	Google Earth	(30 Minutes)
Activity 2:	Where on Earth?	(45 Minutes)
Activity 3:	Finding My Way with GPS	(45 Minutes)
Activity 4:	Treasure Hunt – The Search Is On!	(60 Minutes)
Talk It Over		(30 Minutes)
Optional Activity 5:	Geocaching	
Closing & Cleanup		(10 Minutes)

Budget Range for Activity: $2/youth

Space Needed:
Arrange for a large room with tables and chairs, plus an outdoor space near the program site for GPS and geocaching activities (if possible). Also arrange for a bad-weather backup such as a large gymnasium. Wireless Internet access is required for the activity.

Before the Event

Get Ready:

Tasks for Lead Volunteer

- Do Volunteer Training with the additional OMK Tech Discovery training (found at: http://www.4-hmilitarypartnerships.org/p.aspx?tabid=187)
- Review the activity, all materials and handouts

Do Ahead:

In coordination with the Military Point of Contact:

1. Schedule use of the OMK Tech Discovery Tool Kit. (If you anticipate a large group of youth, schedule additional OMK Tech Discovery Tool Kits. 1 Kit=12 youth.)
2. Schedule use of Mobile Technology Lab.
3. Confirm wireless Internet access.
4. Schedule Uniformed Service Member and at least 1 volunteer per 6 youth to participate in the activity.
5. Schedule a Military Family Life Consultant (MFLC).
6. Recruit a Tech volunteer (for device, laptop and Internet support).
7. Borrow or buy supplies.
8. 4 handheld GPS units are included in the OMK Tech Discovery Tool Kit. They are eTrex® H units. Find and watch an instructional video on YouTube to learn more about them and note the url for use in Activity 3.
9. You may want to coordinate the use of up to 8 additional handheld GPS units for this activity; check with the Military Point of Contact or the OMK Tech Discovery Point of Contact for the availability of additional GPS units. You may also want to find and watch instructional videos on YouTube to learn more about these additional units.
10. Contact volunteers and go through online training (to learn more about OMK and OMK Tech Discovery).
11. Find an outdoor space large enough to do the activity and arrange for a bad-weather backup space.
12. Plan to go to the program site to set GPS coordinates prior to the event.
13. Set up a geocaching map for the Treasure Hunt in Activity 4. Four teams of youth will work their way through a hunt for their own series of 3 caches. Volunteers will record the coordinates of the first cache for each team. Each cache will then contain coordinates for the next cache for that team. The final cache for each team will prompt youth for the next part of the activity.
14. Research existing geocaching locations near the program site for Optional Activity 5.

Copy:

- Sign-in sheet (OMK Tech Discovery Tool Kit)
- Parent letter (1 per youth = 12 copies)
- "Community GPS Using Google Earth" handout (found at the end of the activity plan; copy 1 per youth = 12 copies)
- "Team Challenge Scenarios" (found at the end of the activity plan; make 1 copy and cut into individual scenarios for use in Activity 4)

Get from OMK Tech Discovery Tool Kit:

- Laminated Life/Resilience Skill signs to post around the room (Communication, Teamwork, Problem Solving, Emotional, Social, Family and Spiritual objectives)
- 4 iPad 2 devices, which have the following app downloaded:
  - Google Earth
- 4 GPS units
- Geocaching (GPS) eggs
- Sign-in sheet
- 4 colors of nametags
- Writing utensils
- Transparent tape

Get from Mobile Technology Lab:

- Wireless router with Internet connection
- Laptop
- LCD projector

Buy or Borrow Supplies

Icebreaker: Oh, the Places We Have Been!

- 4 colors of nametags (OMK Tech Discovery Tool Kit; colors will be used to create groups/teams; make sure there are enough for all youth, volunteers and anyone else who will be present)
- Table for sign-in sheet
- Sign-in sheet (OMK Tech Discovery Tool Kit)
- Writing utensils (OMK Tech Discovery Tool Kit)
- Markers
- Flip chart
- Transparent tape (OMK Tech Discovery Tool Kit)

Activity 1: Google Earth

- 4 iPad 2 devices with the following app (OMK Tech Discovery Tool Kit):
  - Google Earth (double-check to make sure it is already downloaded)
- Wireless router with Internet connection (Mobile Technology Lab)

Activity 2: Where on Earth?

- 4 iPad 2 devices with the following app (OMK Tech Discovery Tool Kit):
  - Google Earth (double-check to make sure it is already downloaded)
- Wireless router with Internet connection (Mobile Technology Lab)
- Writing utensils (OMK Tech Discovery Tool Kit)
- "Community GPS Using Google Earth" handouts (found at the end of the activity plan)

Activity 3: Finding My Way with GPS

- 4 GPS units (OMK Tech Discovery Tool Kit)
- Wireless router with Internet connection (Mobile Technology Lab)
- Laptop (Mobile Technology Lab)
- LCD projector (Mobile Technology Lab)
- Flip chart
- Markers
- Geocaching (GPS) eggs (OMK Tech Discovery Tool Kit)
- Snack

Activity 4: Treasure Hunt – The Search Is On!

- 4 GPS units (OMK Tech Discovery Tool Kit)
- 4 iPad 2 devices (OMK Tech Discovery Tool Kit)
- Wireless router with Internet connection (Mobile Technology Lab)
- 12 geocaching (GPS) eggs (OMK Tech Discovery Tool Kit; hidden in advance as instructed)
- 12 Jolly Rancher hard candies (hidden in advance as instructed)

- Team Challenge scenarios (found at the end of the activity plan, copied and cut into slips so there is 1 challenge to place inside each of the final 4 eggs the 4 teams will find)
- "Community GPS Using Google Earth" handouts (found at the end of the activity plan)

Optional Activity 5: Geocaching

- 4 iPad 2 devices with the following app (OMK Tech Discovery Tool Kit):
  - Google Earth (double-check to make sure it is already downloaded)
- Wireless router with Internet connection (Mobile Technology Lab)
- "Community GPS Using Google Earth" handouts (found at the end of the activity plan)
- 4 GPS units (OMK Tech Discovery Tool Kit)
- Geocaching prize (if there is a geocache close enough for the group to find during the time that you have)

Day of the Event

Roles for Uniformed Service Member:

- Help youth identify and form a positive connection with another Service Member
- Encourage youth to ask questions about the Deployment Cycle
- Talk about how they or others may have used GPS as a part of their work
- Share their personal stories about how GPS is important in their missions and the importance of innovation and new technology

Roles for Volunteers:

- Help youth with all activities and form a positive connection with the youth
- Provide positive support for youth throughout the activities
- Assist youth in setting positive goals
- Model problem-solving strategies
- Facilitate problem solving and use teamwork if youth struggle with GPS units or have questions
- Assist with setup and cleanup
- Assist with setting up caches for Activity 4

Before the Youth Arrive….

1. Orient your group of volunteers to the activity (make sure they all have nametags and introduce themselves to each other before you get started).
2. **Activity Orientation for All Volunteers:**
   - Review each activity
   - Cue volunteers where to look for the Life/Resilience Skill objectives in the directions and remind them of the importance of talking about them during the activity; remind them how these will help youth manage deployment issues and adjustments
3. Have Tech volunteer check to make sure the Google Earth app is downloaded, set up the LCD projector so that it works with the laptop and watch the videos listed with the activities.
4. Ask all volunteers to familiarize themselves with the GPS and iPad 2 units.
5. For the Icebreaker activity, post 4 pieces of flip chart paper on different walls of the room. Look at the 4 colors of nametags; write 1 of each of these colors at the top of 1 of the flip chart papers.
6. For Activity 4, have volunteers help set out caches in the outdoor space (based on the map created in the "Do Ahead" instructions). Four teams of youth will work their way through a hunt for their own series of 3 caches. Volunteers should record the coordinates of the first cache for each team. Each cache will then contain coordinates for the next cache for that team. The final cache for each team should contain 1 of the Team Challenge Scenarios (these can be found at the end of the instructions) and 3 Jolly Rancher hard candies.

Set up Your Space:

Space: Arrange for a large room with tables and chairs, plus an outdoor space near the program site for GPS and geocaching activities (if possible). Also arrange for a bad-weather backup such as a large gymnasium. Wireless Internet access is required for the activity.

1. Post **Life/Resilience Skill signs** around the room.
2. Set up greeting table with a sign-in sheet.
3. Provide 4 different colors of nametags so that youth can be divided into 4 groups of 3 for the Icebreaker activity, and make sure you have posted the 4 flip chart pages as directed earlier.
4. Ensure there is wireless Internet access.
5. Make sure the caches are set out for Activity 4 as instructed earlier.

WHAT TO DO **My World – My Direction!**

As the Youth Arrive….

1. Have youth and accompanying adult fill out the sign-in sheet and have participant(s) put on a nametag.
2. Be sure to introduce yourself, the team of volunteers, and the Uniformed Service Member, plus any other individuals who are in the room.

Icebreaker: **Oh, the Places We Have Been! (20 Minutes)**

"Welcome to My World – My Direction. Today we're going to learn how to find our way – even when we don't know where we're going! We're going to use some technology that a few of you may have used before, so I hope you'll help out others who haven't had that chance. We're also going to combine what you may already know with some technology that we think will be new to you."

1. Ask youth to move to the flip chart paper that corresponds to the color on their nametag.
2. Have everyone in each color group introduce themselves to their group and identify all of the places they have lived.
3. Each group can add up how many different locations they have lived and write that total on their flip chart paper.
4. A spokesperson from each group will introduce the other members of their group and share the total number of places the members of their group have lived.
5. Once all of the groups have shared their information, engage them in the Debriefing Questions below.

Debriefing Questions:

- What did you find out about the people in your group?
- What surprised you?
- What do you have in common with other people in your group?
- How does thinking about the places you have lived or traveled remind you of what you are experiencing while your Service Member is deployed?

Activity 1: **Google Earth (30 Minutes)**

1. Have youth gather in their color groups.
2. Hand out an iPad 2 to each group. Discuss the **iPad 2 Device Rules and Regulations** (read the following out loud and then ask youth for examples of what NOT to do):
   - Handle with care
   - Use 2 hands at all times
   - Keep it clean
   - If you break it, you buy it ($500.00)
3. Instruct youth on the basics of the iPad 2 devices and the Google Earth app.
4. Have them practice putting in their current address and searching for an address of a public building near them (library, grocery store, etc.).

Activity 2: **Where on Earth? (45 Minutes)**

1. Youth remain in their 4 teams of 3.
2. *"Today we're going to use a process called the 'community range' to explore some of the things that all of you have in common, and also to share some of the things you've experienced during your life in a Military Family."*
3. *"We're going to ask you a series of questions to help you figure out your team's community range."*
4. *"Using your iPad 2, you'll use a worksheet and maps from Google Earth, or search for Google Maps or MapQuest, to determine your community range."*
5. *"Record your own answers on your handout. Once you've answered all the questions, your team can add your answers together to determine the community range for each question for your team."*
6. Hand out "Community GPS Using Google Earth" sheets.
7. Youth will identify their own distance in miles and then calculate the total miles for the group to find their team's community ranges. For example; Katie may have traveled 2 miles to get to the meeting, Emily traveled 10 miles, Tyler 7 miles, and Allie traveled 21 miles; their community range for that question would be 2+10+7+21= 40 miles.
8. Here are the questions:
   - How many miles did you travel to get here today?
   - How many miles did you travel on your most recent vacation?
   - How many miles to your closest relative's home?
   - How many miles to your furthest relative's home?
   - Estimate the number of miles you travel each week in your normal activities (trips to school, church, ballgames, practice, etc.)
   - How many different houses have you lived in?
   - What is your shoe size? (walking is a form of transportation; combined shoe sizes for the group will be the tiebreaker if needed)
9. Once all of the teams have calculated their community range for each question, the facilitator can lead a large group discussion on each element of the handout, allowing the teams to share stories with each other**.** Depending on the size of the group, choose from the following list of questions:

- Which team traveled the furthest today and how far?
- Which individual traveled the furthest today and how far?
- Which team has lived in the most houses?
- Which individuals have never moved?
- Which team travels the most every week, and why?
- Which individual travels the most every week?
- Which team lives nearest/furthest to or from relatives?
- Which team has the smallest/biggest feet?

10. Collect the iPad 2 devices.

Activity 3: **Finding My Way with GPS (45 Minutes)**

"You've just used Google Earth to find out where and how far you are from each other. Another skill to find direction is the use of a GPS unit. How many of you have used GPS before? Do you have it in your car? Or a handheld unit? Do you know what GPS stands for? (Global Positioning System)

1. *"What are some ways that you've used GPS? Or that others use GPS?"*
2. Record answers brainstormed by youth on a flip chart. Possible answers include: boating, fishing, hunting, camping, hiking, biking, rafting, scouting from land or air, horseback riding, hot air ballooning, aviation, snowmobiling, skiing, search and rescue, four wheeling, emergency vehicle tracking, highway driving, geocaching, surveying, Military, mining and precision agriculture. It's also used to survey disaster areas, map the movement of environmental disasters (oil spills, wild fires, floods, etc.), map fallout shelters, sidewalks, streets, trees and trails in towns.
3. *"GPS is a form of technology that's used on a daily basis by many. It's used in locating, tracking, navigating, mapping and timing."*
4. *"**Locating** is determining a basic location of someone or something."*
5. *"**Tracking** is the process of monitoring something or someone as it moves."*
6. *"**Navigating** is determining where you're going, or getting from 1 location to another."*
7. *"**Mapping** includes surveying and mapping locations around the world."*
8. *"**Timing** involves frequency, precise time measurements and time intervals."*
9. Now label the answers you've brainstormed on the flip chart. What function do each of the uses serve?
10. *"The applications for GPS are endless, with new uses constantly being developed. That's why there's a growing number of users worldwide."*

Learning About Our GPS Units

1. Each GPS unit is different in its design and features; many units will share commonalities that can be explored during this activity.
2. Have youth break into their teams and give each team a GPS unit.
3. *"The GPS instructions we'll give you are general. Many units and phone applications may be similar enough to follow these directions."*
4. Using the LCD projector, show the group the instructional YouTube video for your particular GPS units (found as instructed in the "Do Ahead" section).
5. *"Now that you've watched the GPS video, we're ready to work with the GPS units."*

GPS Training

Throughout the activity, demonstrate and have the volunteers help youth.

1. **Turn GPS receiver on** by pressing the flat power button on the right side.
2. The screen may show satellites trying to acquire a signal. This is called the sky view (the view if you were looking straight up). The empty circles are satellites and the filled-in circles are satellites that have acquired a signal. The numbers in the circles are the satellite numbers. The first satellite to acquire a signal downloads an almanac of satellite information to help the GPS determine location. In order for a GPS to function it must connect with at least 3 satellites. The more satellites it connects with, the more accurate the information it will display.
3. **Use the Zoom In/Out buttons** to see the features of the map location. The filled-in triangle is a "you are here" marker. Some units will allow you to pan around the on-screen map and explore your current location.
4. Units will have a screen that looks like a compass. It will show which direction you are going, speed, etc. You may need to be moving for this feature to work.
5. **Look for a Main Menu page**. Once you find it, you can learn how to create and find waypoints. Waypoints are locations that are saved in the GPS. They may be a home, schools, favorite places, or the location you are standing in at the moment.
6. To get started, we need to make sure all of our units are in the same format. To check this, from the main menu go to Setup, then click Enter; next go to Units; click Enter. The Position Format should be hddd.ddddd°.
7. Now, go back to the Main Menu. The man with the flag labeled "Mark" is how a waypoint is established. Highlight "Mark" on the Main Menu and press the button to enter.
8. The waypoint is assigned a number. You have the option to name the waypoint, but we suggest that you just use numbers for now. It is important that you remember this name or number.
9. To find a waypoint: Go to Main Menu page, and select "Find," "Waypoints."
10. Once you decide which waypoint you want to find – remember the numbers! The waypoint page will show: Select "Go To" (or similar wording) to navigate to a location, compass page or map page. A directional arrow will point and show youth the direction to the waypoint or coordinates. This page may also tell you how far you are from a waypoint in miles, feet, etc.

A Few Reminders to Share with Youth

"You may need to be moving in order for the receiver to know its location and the direction it is moving. AND the receiver will not be completely accurate. It may have to look around and search for an exact location."

GPS Testing

1. Move youth outside (or to the bad-weather backup location).
2. Give each team a plastic egg or similar object to mark the waypoints they create.
3. Be sure the youth start by hiding the egg out in the open like in a small child's egg hunt.
4. Have youth get progressively more challenging in their hiding locations.

5. Have the youth do a round-robin trade of their GPS units with the other 2 teams to find each other's waypoints. Continue activity until they have a good understanding of how to make and find waypoints.
6. *"As you use your GPS Unit, you will see that the unit displays the current latitude and longitude of its location. These coordinates should be displayed in decimal degrees, which means the coordinates are displayed in a number with a single decimal."*

GPS Activity

1. Pick one Latitude/Longitude point and have each youth walk around until all the units are displaying the same latitude/longitude.
2. Youth will notice they are standing in a variety of locations, all within the same proximity but not in the exact same spot. Reinforce that the accuracy of GPS units varies.
3. Have everyone stay in these spots, with the same coordinates on their GPS units, but in slightly different locations.
4. Draw an imaginary circle around the youth.
5. Have youth estimate the number of feet that different youth are from the center of the circle.
6. For example, they all may be standing 10 feet from the center of the imaginary circle, which means the accuracy of the units is plus or minus 10 feet from the actual coordinates. Youth will need to keep this in mind for the next activity.
7. Pull youth back indoors for a snack and bathroom break.

Activity 4: **Treasure Hunt – The Search Is On! (60 Minutes)**

1. Youth are back inside, still in their teams and can continue to share GPS units.
2. *"**GEOCACHING** is a real-world outdoor treasure hunting game. Players use GPS-enabled devices to try to locate hidden containers, called geocaches, which are really hidden treasures. Then they share their experiences online."*
3. *"To introduce you to the geocaching process, let's take a few minutes to watch a video. You can find it at the top url written on your handout from the last activity."* (http://www.youtube.com/watch?v=wcFvoU7b92Q)
4. Handout the iPad 2 devices again and have youth watch the video.
5. After the video, collect the iPad 2 devices.
6. *"Today we have a geocache treasure hunt activity set up for you. This is a little different than some of the geocaching activities you may have done in the past or will do with your Families."*
7. *"You'll work in your teams to find the treasures. The first treasure stash will provide you with the coordinates for your next treasure location. The final treasure will provide you with a Team Challenge."*
8. Provide each team with their first set of coordinates to begin the Treasure Hunt activity.
9. When the teams reach the final treasure they will find their Team Challenge.
10. Have all teams move to a central location. Each team should process their own Team Challenge.
11. After teams have had time to process their Team Challenge, have everyone gather together as a large group. Have each team present their Team Challenge and the ideas they generated.

12. Continue on to the Talk It Over section.

Talk It Over: **(30 Minutes)**

1. To help you focus the discussion, briefly look at Life Skill, Resilience Skill and Science and Technology Objectives on page 1.
2. Lead the entire group through the Talk It Over discussion.
3. Remember to include the Uniformed Service Member in the discussion.
4. Have a volunteer take comments/notes about group dynamics and specific youth comments.

Share/Reflect

- What surprised you about the activities you did today?
- What have you learned about yourself? Others?
- What did you learn about teamwork while doing these activities?
- How did you share experiences with your team?
- Did doing the activities help you understand different communication styles? How?

Process

- How did others help you in the activities?
- What was challenging about working as a team as you moved through the activities? How did you solve those issues?
- What did you learn about communicating with others?
- What made these good activities?

Generalize

- Why is it important to hear how other Military youth have approached challenges?
- What can you do to approach challenges in a positive and optimistic way while navigating the changes in your Family during mobilization?
- How can you use this activity to build relationships in your Family and with your Service Member?

Apply

- How might you apply what you learned from the other youth as you experience challenges and/or successes in your life?
- In what ways do people help each other learn new things?
- How can you tell others that their help is appreciated?
- What can you do to help yourself move in a positive direction and not lose your personal coordinates?
- How can you use these skills in a future career?

Debrief Youth on Life/Resilience Skills:

Point to the Life/Resilience Skill signs that are posted around the room:
Communication, Teamwork, Problem Solving, Emotional, Social, Family and Spiritual.
As you point to each sign, ask:

- How have our activities today helped you develop your _____ (skills)?
- Why do you think these skills are important?
- Why do you think these skills are important?

Optional Activity 5: Geocaching

Use this activity if there is additional time after the "debrief" and before the youths' Families arrive.

1. *"Now that you've seen how geocaching works, we want you to use your iPad 2 device to look at a website where you can create your own account to set up your own geocaching game. That's the second url on your handout."* (www.geocaching.com)
2. Once at the website, you will each need to create an account.
3. The application is free and the instructions are simple to follow.
4. Once you each have an account for geocaching set up, go to your email and open the message from Geocaching to validate your account by clicking on the appropriate link.
5. *"Now you are ready to go geocaching!"*
6. Walk the room and help youth with setup until everyone is ready to move on.
7. Go back to geocaching.com, log in with your new name and password.
8. Under the PLAY tab click on HIDE AND SEEK A CACHE and type in your current location to see geocaches near you.
9. You should notice the distance the nearest geocache is from your current location, a map of the general vicinity and clues to finding your first cache.
10. Use your GPS unit and program the given coordinates to find the cache.
11. If a geocache is near you may go out and find your cache; if not, this is a terrific activity for youth to do at another time.
12. *"It's standard procedure to leave something in the geocache you find. You'll want to prepare for this by bringing a small token to leave in the cache. If you're setting this up for younger youth, you may leave a small toy, candy or a coin. If you're leaving it for one of your friends or peers, you might leave a keychain, a hemp bracelet or a note of encouragement. If using an existing cache you should sign in to the log sheet to identify to the cache owner that you found their cache."*
13. *"After finding the cache you may want to go back to geocaching.com to log in and claim your cache by logging your visit. By claiming your cache and logging your visit you'll be keeping a record of every geocache you find."*

Closing & Cleanup: **(10 Minutes)**

"We hope you had a great day today and learned some new things about GPS and how it can and will impact your world. When you leave, keep in mind some of the skills that you learned as you worked with other members of your group, the friends you made and how important it is to have strategies for knowing how to get where you need to go.

"Before you leave today, please take the parent letter with you and give it to your parent. Maybe you'll be able to teach them some of the things you learned about GPS. Think about some ways you could involve them in a 'Treasure Hunt' experience."

Extend the Activity:

- Create a Family geocaching experience that you can complete as a Family group. Be sure to take photos to share electronically with your deployed Service Member.
- As you begin thinking about your Service Member returning home, develop a geocaching opportunity for them. Instead of including prizes in each of the caches, leave a note that shares either information about a new skill you learned while they were away or a reason you are glad they are home. Have your final location be a new restaurant that you can go to and discuss the information shared in the caches.

Post Event

Lead Volunteer:

- Check to make sure that the space is clean and returned to the arrangement it was in prior to your arrival
- Inventory and put all equipment and supplies back into their respective kits and pack them up to return as directed; make sure all iPad 2 devices, connecter kits, cords and power chargers are returned to the OMK Tech Discovery Tool Kit
- Fill out report:
  - Names of all volunteers
  - Number and names of youth (attach sign-in sheet)
  - Quotes from youth about activities
  - Other important notes on activities, volunteers and youth
  - Critical follow-ups (parents about behavior/worries about a particular youth, inappropriate language from a volunteer, etc.)
  - Indicate if there are videos, photos or other content that needs to be forwarded to youth/Family; make it clear which items go to each youth/Family

Activity Developed for OMK Tech Discovery by:
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The OMK Tech Discovery Curriculum was developed at the University of Minnesota Extension Center for Youth Development through a partnership of the Department of Defense, Office of the Secretary of Defense, Military Community & Family Policy, Office of Family Policy/Children and Youth and the United States Department of Agriculture, National Institute of Food and Agriculture, Institute of Youth, Family and Community, 4-H National Headquarters under Kansas State University special project number 2010-48713-21882.

My World – My Direction!

Dear Family,

Today we put our spatial skills to work by exploring where everyone is from and discovering where everyone has been. First we used the iPad 2 devices to learn about Google Earth. We found out about other Military youth in our group by figuring out our 'community range.' Then we learned how to use a GPS unit and went on a treasure hunt! Geocaching is a treasure hunt game that anyone can participate in all over the world. Ask your youth about how to play.

We discussed deployment locations and how we have moved around the country with the Military. We also discovered how many of us have had similar experiences and feelings. We talked about looking for and appreciating the positive things that can happen every day.

It was a very fun day, but it also had a more serious side. We talked about how an activity like geocaching can build Family bonds and relationships before deployment, during deployment and in getting to know one another post-deployment.

Thanks for helping your youth participate in this OMK Tech Discovery experience!

Best regards,

Conversation Starters:

- What does GPS mean?
- If we had a GPS in our car, what coordinates would you think would be important to program into it?
- What voice/accent/gender would you choose for a car GPS?
- What would you put in a personal geocache? Where would you hide it?
- If you could go anywhere in the world, right now, this minute, where would it be? Why there?

Community GPS Using Google Earth

1. How many miles did you travel to get here today?

2. How many miles did you travel on your most recent vacation?

3. How many miles to your closest relative's home?

4. How many miles to your furthest relative's home?

5. Estimate the number of miles you travel each week in your normal activities (trips to school, church, ballgames, practice, etc.)

6. How many different houses have you lived in?

7. What is your shoe size?

Two online addresses you will need for our activities:

http://www.youtube.com/watch?v=wcFvoU7b92Q

www.geocaching.com

Team Challenge Scenarios

You see a news report that highlights conflict in the area where your best friend's father is currently deployed. You remember that your friend said they had not been able to reach their dad for several days. What do you do?

Your little brother is the pitcher for his baseball team which just won their tournament. He does not seem excited about the accomplishment even though he pitched the winning game; in fact, he says it was no big deal. You wonder if he is upset since your dad never saw any of his games this year. How can you help him?

A new person has arrived at your school. They are in several of your classes, yet you do not think you have anything in common. They are very quiet and you are very outgoing and involved in lots of school and out-of-school activities. You find out from someone else in the class that the new person's brother was wounded during a recent conflict overseas. What do you do?

You have been offered the lead part in the spring musical. You are thrilled since this has been something you have hoped to achieve since you were in grade school. The part will require you to spend 2 to 3 hours each evening after school in rehearsals. Your mom's unit is deploying in 3 weeks; the spring musical occurs in 4 weeks. You know you will need to pick up extra chores at home to help as she gets ready to deploy and then after she is gone. Should you take the part? Should you turn it over to the understudy? What should you do?

Your best friend is moving. Their Service Member has been transferred to a base in another state. You are sad that they are moving, yet they are very excited about the new location. You start to wonder if your friend was not as close a friend as you thought. Do you approach them about how sad you feel? Or do you just pretend that you don't care and you are glad they are happy to be moving? What would you do? Why?

You will be graduating from high school next week and you are excited because your whole Family will be there. They have even planned a huge graduation party. You are sharing all of the plans with some of your classmates when you notice that one of them is not engaged in the conversation. After a while they get up and leave. You ask the others what the problem is and they share that they learned that the classmate who left found out that their Service Member's tour had been extended another year. Prior to the extension, they were to be home within 2 months. Can you help them?

Rivets and Steel

Time Needed: 2 hours
Skill Level: Basic
Number of Youth: 12
Deployment Segment: Mobilization
Internet Required: No

Life Skill Objectives:

- **Communication:** Understand the support needed by your Service Member during mobilization through positive communication
- **Problem Solving:** Work with others to solve problems or conflicts during the construction process using inquiry learning and positive communication skills
- **Teamwork:** Work together to learn more about being a good team member and apply these skills to your Family team while your Service Member is deployed

Resilience Skill Objectives:

- **Emotional:** Approach challenges in a positive and optimistic way and understand how you can be a positive emotional support for your Service Member
- **Social:** Explore how strong connections with others can help you act in ways that are positive even under the most adverse and challenging circumstances
- **Family:** Explore ways that trust can relieve some of the pressures of mobilization
- **Spiritual:** Look for and appreciate the positive things that can happen when you build connections with your community and surroundings

Science and Technology Objectives:

- Use and understand basic components of bridge building
- Demonstrate and use inquiry learning while building a strong bridge
- Analyze the variables that contributed to your bridge capacity

Activity Overview:

Youth will use engineering and problem-solving skills to assemble a bridge strong enough to meet a friendly challenge and see which bridge can hold the most weight.

Shout Out to Youth!

Create a bridge that will stand up to the test! Rivets and Steel will test your engineering skills and challenge your inner "bridge builder."

Prerequisites: None

Breakdown of Activities:

Icebreaker	Wooden Block Tower Game & BridgeBasher	(30 Minutes)
Activity 1:	Rivets and Steel	(45 Minutes)
Activity 2:	Construction Summit	(30 Minutes)
Closing & Cleanup		(15 Minutes)

Budget Range for Activity: $4/youth

Space Needed:
You need a room with tables and chairs (with a minimum of 4 tables with 3 chairs each). You will also need an outlet available to each table to plug in glue guns. Tape disposable table coverings on the tables to prevent hot glue damage.

Before the Event

Get Ready:

Tasks for Lead Volunteer

- Do Volunteer Training with the additional OMK Tech Discovery training (found at: http://www.4-hmilitarypartnerships.org/p.aspx?tabid=187)
- Review the activity, all materials and handouts
- Try your hand at building your own bridge

Do Ahead:

In coordination with the Military Point of Contact:

1. Schedule use of OMK Yellow Ribbon Tool Kit.
2. Schedule use of the OMK Tech Discovery Tool Kit. (If you anticipate a large group of youth, schedule additional OMK Tech Discovery Tool Kits. 1 Kit=12 youth.)
3. Schedule Uniformed Service Member and at least 1 volunteer per 6 youth to participate in the activity.
4. Schedule a Military Family Life Consultant (MFLC).
5. Borrow or buy supplies.
6. Contact volunteers and go through online training (to learn more before you show up about OMK and OMK Tech Discovery).

Copy:

- Sign-in sheet (OMK Tech Discovery Tool Kit)
- "The Process of Inquiry" chart (found at the end of the activity plan; 1 copy per table = 4 copies + copies for volunteers)
- Parent letter (1 per youth = 12 copies)

Get from OMK Yellow Ribbon Tool Kit:

- 6 hot glue guns
- Hot glue gun glue sticks
- 12 pairs cotton gloves (for safety)

Get from OMK Tech Discovery Tool Kit:

- Laminated Life/Resilience Skill signs to post around the room (Communication, Teamwork, Problem Solving, Emotional, Social, Family and Spiritual objectives)
- 1 Jenga game
- Sign-in sheet
- Nametags
- Writing utensils
- Paper
- Jumbo Craft Sticks
- 4 iPad 2 devices, which have the following app downloaded:
  - BridgeBasher

Buy or Borrow Supplies

Icebreaker: Wooden Block Tower Game & BridgeBasher

- 4 wooden block tower games (such as Jenga; 1 is available in the OMK Tech Discovery Tool Kit)
- 4 yardsticks
- 4 iPad 2 devices with the following app (OMK Tech Discovery Tool Kit):
  - BridgeBasher (double-check to make sure it is already downloaded)
- Nametags for all youth, volunteers, and anyone else who will be present (OMK Tech Discovery Tool Kit)
- Table for sign-in sheet
- Sign-in sheet (OMK Tech Discovery Tool Kit)
- Writing utensils (OMK Tech Discovery Tool Kit)

Activity 1: Rivets and Steel

- Disposable table coverings
- Masking tape to hold the table coverings on the table
- Jumbo Craft Sticks (40 per team = 160 total; OMK Tech Discovery Tool Kit)
- 8 glue guns (6 are available in the OMK Yellow Ribbon Tool Kit; find a minimum of 2 more so that each team has at least 2)
- Hot glue gun glue sticks (3 sticks/per glue gun = 24 total; OMK Yellow Ribbon Tool Kit)
- 12 pairs cotton gloves (OMK Yellow Ribbon Tool Kit)
- Books or items to test weight of bridges
- 4 shoeboxes or plastic containers
- 4 pairs scissors (minimum)
- Bathroom scale (digital preferred)
- 4 iPad 2 devices (OMK Tech Discovery Tool Kit)
- "The Process of Inquiry" handout (found at the end of the activity plan; 1 per table=4)
- Paper (OMK Tech Discovery Tool Kit)
- Writing utensils
- Flip chart and markers (if the room does not have a blackboard or other writing surface)

Activity 2: Construction Summit

- Snack
- 12 prizes

Day of the Event

Roles for Uniformed Service Member:

- Help youth identify and form a positive connection with another Service Member
- Encourage youth to ask questions about the Deployment Cycle
- Talk about how you or others observed different bridges during your deployment
- Share your personal stories about bridges and the importance of structure and maintenance
- Share how bridges around the world look different and are made differently

Roles for Volunteers:

- Help youth with all activities and form a positive connection with the youth
- Provide positive support for youth throughout the activities
- Assist youth in setting positive goals
- Model problem-solving strategies
- Facilitate problem solving and use teamwork when youth become frustrated or have questions
- Assist with setup and cleanup

Two Hours Before the Youth Arrive….

1. Orient your group of volunteers to the activity (make sure they all have nametags and introduce themselves to each other before you get started).
2. **Activity Orientation for All Volunteers:**
    - Handout and review "The Process of Inquiry" chart
    - Discuss **inquiry learning** and how it can be applied to the targeted life skills of **communication**, **teamwork** and **problem solving**
    - Cue volunteers where to look for the Life/Resilience Skill objectives in the directions and remind them of the importance of discussing them during the activity; remind them how these will help youth manage deployment issues and adjustments
    - Review each activity
    - Have volunteers help set up for the event, such as putting table coverings on the tables and counting out craft sticks

Set up Your Space:

Space: You need a room with tables and chairs (with a minimum of 4 tables with 3 chairs each). You will also need an outlet available to each table to plug in glue guns. Tape disposable table coverings on the tables to prevent hot glue damage.

1. Post **Life/Resilience Skill signs** around the room.
2. Set up a greeting table with a sign-in sheet.

WHAT TO DO **Rivets and Steel**

As the Youth Arrive….

1. Have youth and accompanying adult fill out the sign-in sheet and have participant(s) put on a nametag.
2. Welcome youth as they arrive; don't forget to introduce yourself and your team of volunteers, the Uniformed Service Member and others that might be in the room, along with their roles.
3. Instruct youth to choose a table and say their name and where they are from.

Icebreaker: **Wooden Block Tower Game & BridgeBasher (30 Minutes)**

"*I'd like to welcome you to the Rivets and Steel activity. Please introduce yourself and tell your tablemates where you live. I'd like to introduce myself too. I'm _____ and I will be working with all of you for the next couple of hours. Also here in the room are _____ and _____.*"

1. Point out the wooden blocks on their table.
2. The rules of the game will be:
   - Build the largest tower
   - Everybody at your table must participate in the activity
   - If the tower falls you can rebuild
   - Measure your tallest tower with the yardstick
   - You will have 15 minutes
3. After they have played 2 or 3 rounds, have them repackage their wooden block game.
4. Hand out the iPad 2 devices, 1 per table, and review the **iPad 2 Rules and Regulations** (read the following out loud and then ask youth for examples of what NOT to do):
   - Handle with care
   - Use 2 hands at all times
   - Keep it clean
   - If you break it, you buy it ($500.00)
5. Explain they can check out the BridgeBasher app on the iPad 2 and allow them time to do so.
6. Indicate that each table will be a team for the Rivets and Steel activity and that today they will be working in teams to build bridges.

Debriefing Questions:

- What was it like working as a team to build your tower?
- How did you feel when the tower fell?
- How did you rely upon each other after the fall of the tower?
- How did you keep your foundation strong?
- How do you keep your own supportive foundation strong?
- Can you relate this activity with having your Service Member still deployed?
- How can you create a supportive foundation during this time of your Service Member's deployment?

- How did playing BridgeBasher help you understand how to construct stronger connections?
- Once you have a strong foundation, how can you provide a stronger connection for you and your family during deployment?

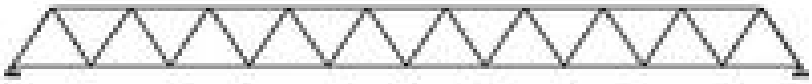
"Constructing a solid foundation and building the supports and connections that are needed are critical elements in engineering and in life. During deployment, your foundation shifts and more weight is added. It's critical that you approach challenges in a positive and optimistic way. This next activity will let you engineer a bridge and explore how strong connections that build your connections with others can help you act in ways that are good even under the most challenging circumstances."

Activity 1: **Rivets and Steel (45 Minutes)**

"Iron and steel bridges are used all around the world today. We're going to talk about truss bridges. Can anyone tell me what a truss bridge looks like? What shape is the truss bridge composed of? (triangle)

"Today we'll be focusing on the Warren truss, patented in 1848. It uses longitudinal sections joined at an angle to form alternating inverted equilateral triangles (a triangle where all sides are equal)along the length of a bridge. This makes sure that each strut, beam or tie is not subject to bending or straining forces, but only to tension or compression. Loads on the diagonals alternate between compression and tension (approaching the center). Diagonals create strength in structures."

Demonstrate the formation of a truss triangle using the craft sticks. Picture/illustrate on a blackboard or flipchart.



1. Give each team 40 Jumbo Craft Sticks, 2 hot glue guns and 3 glue sticks per glue gun.
2. Instruct each team to create a truss bridge; in the end it should hold a substantial amount of weight.
3. Let the teams work on making their bridges. Have a volunteer take pictures or movies with an iPad 2 device; they can be emailed to youth after the event.
4. Encourage youth to draw up a design and use the "Process of Inquiry" handout to work through challenges as they make their bridges.
5. Once the bridges are complete and the glue is dry, teams can test out their bridge with a practice run to see how well it holds some weight.
6. Space 2 tables a distance apart so youth can place the bridge between the 2 tables.
7. Continue to add books or other objects (as weights) to the shoebox or plastic container on top of the bridge.
8. In the end the bridge will break. On the scale, have youth weigh the final amount of weight their bridge could hold before it collapsed.
9. If some teams don't complete the challenge, help youth strategize what they could do differently to work together more successfully; review the "Process of Inquiry" chart too.

Activity 2: **Construction Summit (30 Minutes)**

Talk It Over:

1. To help you focus the discussion, briefly look at Life Skill, Resilience Skill and Science and Technology Objectives on page 1.
2. Lead the entire group through the Talk It Over discussion.
3. Remember to include the Uniformed Service Member in the discussion.
4. Have a volunteer take comments/notes about group dynamics and specific youth comments.
5. Pass out snack and prizes.

Share/Reflect

- Did you think your bridge could hold the weight?
- At what point did you think your bridge would break?
- How did you feel when the bridge finally gave way?
- Did you all feel a part of the team? What contributions did you bring to your team?
- Who had leadership roles on the team? What made them good leaders?

Process

- How did you develop a plan as a team to build the bridge?
- What was it like to complete the finished product?
- After seeing the finished product, is there anything you would do to enhance it?
- Was there a point that you saw another solution to your bridge and could not communicate how to do it? How did you resolve this conflict?
- How does engineering and bridge building connect with your Service Member's deployment?

Generalize

- How can you hold more weight during the deployment?
- How can you build strong connections with others to help you act in ways that are positive even under the most adverse and challenging circumstances?
- How can you approach challenges in a positive and optimistic way and be a positive support for your Service Member during deployment?
- As you tried out your bridge and saw its strengths and weaknesses, could you relate those to your own Family strengths or weaknesses?

Apply

- How can you use some of the skills around bridge building to strengthen your relationships at home, school or with your Service Member?
- When in your life do you feel your bridge is getting weak and needing some structural help? How would you get the repairs that are needed? Where are your supports?
- How can you work with others in your Family to sustain the additional weight in your house during deployment?
- How can you appreciate the positive things that can happen and build connections with your community and surroundings?

Debrief Youth on Life/Resilience Skills:
Point to the Life/Resilience Skill signs that are posted around the room:
Communication, Teamwork, Problem Solving, Emotional, Social, Family and Spiritual.
As you point to each sign, ask:

- How have our activities today helped you develop your _____ (skills)?
- Why do you think these skills are important?

Closing & Cleanup: **(15 Minutes)**
"Thank you for coming and experiencing Rivets and Steel and learning about bridges. I hope you had a good time, met some new friends and picked up some skills you can use after you leave here today. Think about the strength of a bridge and how you and your Service Member have a long strong connection even if you are far away from each other.

"As you leave today, please take the parent letter handed to you and give it to your parent. Help me thank the volunteers and Service Members who are here today with a round of applause. Thank you for your time with us today. Thank you for volunteering with this event.

"Before you leave, I would ask that you and your team members help clean up your area. We hope you have a safe ride home and we hope to see you again. Thanks for coming!"

Extend the Activity:

- If you want to challenge the teams even more, try connecting the bridges together and see how much weight they can handle

Post Event

Lead Volunteer:

- Check to make sure that the space is clean and returned to the arrangement it was in prior to your arrival
- Inventory and put all equipment and supplies back into their respective kits and pack them up to return as directed; make sure all iPad 2 devices, connecter kits, cords and power chargers are returned to the OMK Tech Discovery Tool Kit
- Fill out report:
  - Names of all volunteers
  - Number and names of youth (attach sign-in sheet)
  - Quotes from youth about activities
  - Other important notes on activities, volunteers and youth
  - Critical follow-ups (parents about behavior/worries about a particular youth, inappropriate language from a volunteer, etc.)
  - Indicate if there are videos, photos or other content that needs to be forwarded to youth/Family; make it clear which items go to each youth/Family

Activity Developed for OMK Tech Discovery by:
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Wendy Rubinyi, Instructional Design Specialist (rubinyi.com)

The OMK Tech Discovery Curriculum was developed at the University of Minnesota Extension Center for Youth Development through a partnership of the Department of Defense, Office of the Secretary of Defense, Military Community & Family Policy, Office of Family Policy/Children and Youth and the United States Department of Agriculture, National Institute of Food and Agriculture, Institute of Youth, Family and Community, 4-H National Headquarters under Kansas State University special project number 2010-48713-21882.

Rivets and Steel

Dear Family,

Today we put our creative engineering skills to work! We constructed truss bridges and analyzed the variables that contributed to our bridge capacity, and then tested them with a variety of weight amounts. This activity really put your youth's engineering skills to the test!

But the activity also challenged your youth on other levels. Teams practiced positive communication skills and talked about the supports needed for you and your Family, as well as your Service Member, during mobilization. Youth also worked with others to solve problems or conflicts during the construction process using inquiry learning.

We talked about showing resilience during the time your Service Member is deployed. We discussed approaching challenges in an optimistic way. We encouraged youth to understand how they can be a positive emotional support for your Service Member. We challenged them to explore how strong connections with others can help them act in ways that are positive even under the most adverse and challenging circumstances and to look for and appreciate the positive things that can happen when they build connections with their community and surroundings

This activity can be a good analogy to what is happening in their lives on a daily basis. Talk to your youth about pressures, supports, variables, weights and stresses. Help them find supportive friends, environments and resources to handle the heavy issues in their lives. By helping your youth, you help everyone in your Family. Thanks for allowing your youth to participate in this OMK Tech Discovery experience!

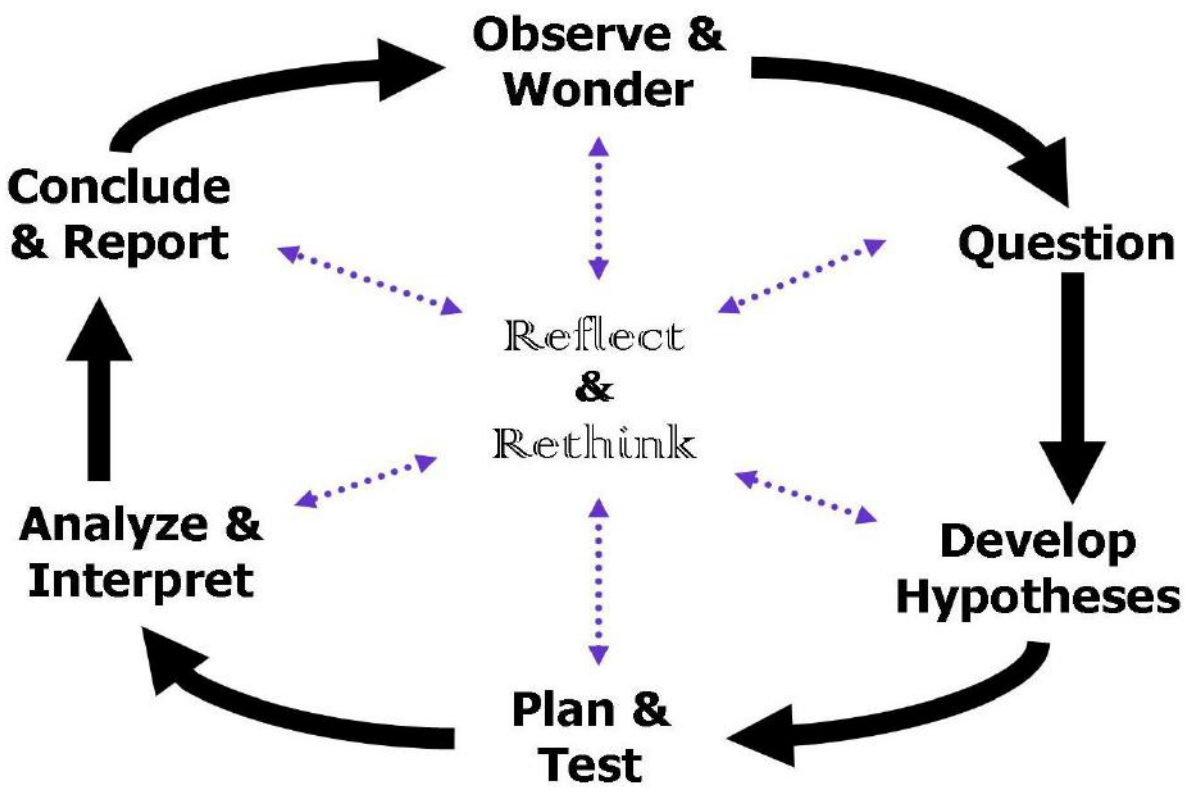
Best regards,

Conversation Starters:

- When you have an obstacle in your way, who is your strongest connection? How to they support you?
- How can you build communication? How is it like bridge building?
- How many types of engineering jobs can you think of off the top of your head?
- If you were going to be an engineer, what kind of engineer would you be? Why?

Andrea Lorek Strauss, Extension Educator, University of Minnesota Extension, astrauss@umn.edu

THE PROCESS OF INQUIRY



Scientific discoveries are made through the process of inquiry, though scientists often use the word "research" or "the scientific method" to describe what they do. Inquiry involves detailed examination of phenomena with the goal of discovering and interpreting new knowledge, whether the knowledge is new to human-kind, to a small group of people, or even just to the person doing the research.

FACILITATOR SKILLS THAT FOSTER INQUIRY

Inquiry is learner-driven, not teacher driven, so the instructor must take a back seat to his or her participants' curiosity. The instructor simply facilitates the learning process. Facilitating inquiry experiences requires flexibility, patience, tolerance of ambiguity, and an emphasis on student skill building. When learner-driven inquiry takes place, the instructor becomes a learner, too. And not just in the content area, but by gaining a deeper understanding of his/her students' thinking processes as well as the process of inquiry itself.

Robot Rovers

Time Needed: 4 hours
Skill Level: Intermediate
Number of Youth: 12
Deployment Segment: Mobilization
Internet Required: Optional

Life Skill Objectives:

- **Communication:** Develop an understanding of communication styles to better understand how to communicate with others in a positive and productive way
- **Problem Solving:** Work with others in the building process to solve problems or conflicts using inquiry learning and positive communication skills
- **Teamwork:** Work with others to tackle challenges in a positive way

Resilience Skill Objectives:

- **Social:** Practice good communication skills, exchange ideas and work with others towards a common goal
- **Family:** Consider how precise and specific communication can help alleviate conflict and improve communication with Family members during mobilization

Science and Technology Objectives:

- Practice the engineering design process as you follow simple instructions to construct a robot and work as a team to modify the design
- Develop basic skills in visual programming by developing pseudocode and programming with LEGO® MINDSTORMS® NXT

Activity Overview:

Youth will assemble a simple robot following a design plan and then learn about how sensors can be utilized to make the robot autonomous. They will create their own design for adding sensors to their robot, test their design and then redesign it to function better in the Obstacle Course Challenge.

Shout Out to Youth!

Have you ever wanted to program your own robot? In Robot Rovers you will not only program one, but build it as well!

Prerequisites: None

Breakdown of Activities:

Icebreaker	Find That Thingamajig	(15 Minutes)
Activity 1:	Build a Robot Rover	(60 Minutes)
Optional Activity 2:	NASA Rovers	(15 Minutes)
Activity 3:	Making Sense of Sensors	(15 Minutes)
Activity 4:	Bat Game	(20 Minutes)
Optional Activity 5:	Touch to Start – Touch to Stop	(20 Minutes)
Activity 6:	Obstacle Challenge Course	(40 Minutes)
Activity 7:	Snack and Summit	(40 Minutes)
Closing & Cleanup		(15 Minutes)

Budget Range for Activity: $2/youth

Space Needed:
You will need a large room with open space, at least 1 table per 2 teams (3-6 youth per team), access to electric outlets for each group and chairs for youth. Wireless Internet access is required for Optional Activity 2.

Before the Event

Get Ready:

Tasks for Lead Volunteer

- Do Volunteer Training with the additional OMK Tech Discovery training (found at: http://www.4-hmilitarypartnerships.org/p.aspx?tabid=187)
- Review the activity, all materials and handouts
- Familiarize yourself with LEGO MINDSTORMS NXT and the names for various LEGO pieces (axle, etc.)

Do Ahead:

In coordination with the Military Point of Contact:

1. Schedule use of **2** OMK Tech Discovery Tool Kits. (If you anticipate a large group of youth, schedule additional OMK Tech Discovery Tool Kits. For this activity, 1 Kit = 3 youth ideally and 6 youth maximum.)
2. If you have more than 6 youth, try to coordinate with your state's 4-H office for additional LEGO MINDSTORMS NXT kits and software that might be available to borrow, or ask your Military Point of Contact if they know of other LEGO MINDSTORMS NXT kits and software available in your state that you can borrow.
3. Note: the LEGO® MINDSTORMS® for Schools kit is very different from the LEGO MINDSTORMS NXT kit and the activities provided will need to have some major modifications if the Schools kit is used.
4. Schedule use of Mobile Technology Lab.
5. Check that all laptops have LEGO MINDSTORMS NXT software installed.
6. Arrange for wireless Internet access if you plan to include Optional Activity 2.
7. Schedule Uniformed Service Member and at least 1 volunteer per 6 youth to participate in the activity.
8. Schedule a Military Family Life Consultant (MFLC).
9. Borrow or buy supplies.
10. Contact volunteers and go through online training (to learn more before you show up about OMK and OMK Tech Discovery).
11. Recruit a Tech volunteer (for device, laptop and Internet support).

Copy:

- Sign-in sheet (OMK Tech Discovery Tool Kit)
- Parent letter (1 per youth)
- Robot Rovers Engineering Notebook (found at the end of the activity plan and copied, preferably in color, and then stapled together to create 1 set per youth plus extras for volunteers, with pages including):
  - Cover
  - 7 pages of instructions
  - "The Process of Inquiry" sheet
  - An additional blank sheet

Get from OMK Tech Discovery Tool Kits:

- Laminated Life/Resilience Skill signs to post around the room (Communication, Problem Solving, Teamwork, Social and Family objectives)
- Sign-in sheet
- 2 LEGO MINDSTORMS NXT robotics kit (1 from each OMK Tech Discovery Tool Kits)
- iPad 2 devices (optional)
- Egg timer
- Writing utensils
- Nametags

Get from Mobile Technology Lab:

- Wireless router with Internet connection (if you are planning to do Optional Activity 2)
- Laptops with LEGO MINDSTORMS NXT software installed (1 per team plus 1 for lead volunteer)
- LCD projector
- Digital camera (optional)
- Video camera (optional)

Buy or Borrow Supplies

Icebreaker: Find That Thingamajig

- Nametags for all youth, volunteers and anyone else who will be present (OMK Tech Discovery Tool Kit)
- Table for sign-in sheet
- Sign-in sheet (OMK Tech Discovery Tool Kit)
- Writing utensils (OMK Tech Discovery Tool Kit)
- Laptops with LEGO MINDSTORMS NXT software installed (Mobile Technology Lab, 1 per team)
- LEGO MINDSTORMS robotics kit (OMK Tech Discovery Tool Kits; 1 per 3 youth is ideal, but the activity will work with 1 per 6 youth)
- Egg timer (OMK Tech Discovery Tool Kit)

Activity 1: Build a Robot Rover

- Laptops with LEGO MINDSTORMS NXT software installed (Mobile Technology Lab; 1 per team plus 1 for lead volunteer)
- LEGO MINDSTORMS robotics kit (OMK Tech Discovery Tool Kits; 1 per 6 youth maximum)
- Engineering Notebooks (found at the end of the activity plan; copied as instructed)
- Writing utensils (OMK Tech Discovery Tool Kit)
- LCD projector (Mobile Technology Lab)

Optional Activity 2: NASA Rovers

- 1 per team, either iPad 2 devices (OMK Tech Discovery Tool Kit) or laptops (Mobile Technology Lab)
- Wireless router with Internet connection (Mobile Technology Lab)
- Engineering Notebooks (found at the end of the activity plan; copied as instructed)
- Writing utensils (OMK Tech Discovery Tool Kit)

Activity 3: Making Sense of Sensors

- Laptops with LEGO MINDSTORMS NXT software installed (Mobile Technology Lab; 1 per team plus 1 for lead volunteer)
- LEGO MINDSTORMS NXT robotics kit (OMK Tech Discovery Tool Kit; 1 per 6 youth maximum)
- Engineering Notebooks (found at the end of the activity plan; copied as instructed)
- Writing utensils (OMK Tech Discovery Tool Kit)
- Flip chart
- Marker
- LCD projector (Mobile Technology Lab)

Activity 4: Bat Game

- Laptops with LEGO MINDSTORMS NXT software installed (Mobile Technology Lab; 1 per team plus 1 for lead volunteer)
- LEGO MINDSTORMS NXT robotics kit (OMK Tech Discovery Tool Kit; 1 per 6 youth maximum)
- Engineering Notebooks (found at the end of the activity plan; prepared as instructed)
- Writing utensils (OMK Tech Discovery Tool Kit)
- Objects to create obstacle course (such as small boxes, 3-ring binders, etc.)
- LCD projector (Mobile Technology Lab)

Optional Activity 5: Touch to Start – Touch to Stop

- Laptops with LEGO MINDSTORMS NXT software installed (Mobile Technology Lab; 1 per team plus 1 for lead volunteer)
- LEGO MINDSTORMS NXT robotics kit (OMK Tech Discovery Tool Kit; 1 per 6 youth maximum)
- Engineering Notebooks (found at the end of the activity plan; copied as instructed)
- Writing utensils (OMK Tech Discovery Tool Kit)
- LCD projector (Mobile Technology Lab)

Activity 6: Obstacle Challenge Course

- Laptops with LEGO MINDSTORMS NXT software installed (Mobile Technology Lab; 1 per team)
- LEGO MINDSTORMS NXT robotics kit (OMK Tech Discovery Tool Kit; 1 per 6 youth maximum)
- Engineering Notebooks (found at the end of the activity plan; copied as instructed)
- Writing utensils (OMK Tech Discovery Tool Kit)
- Objects to create obstacle course (such as small boxes, 3-ring binders, etc.)
- Optional: iPad 2 (OMK Tech Discovery Tool Kit) or a digital or video camera (Mobile Technology Lab)

Activity 7: Snack and Summit

- LEGO MINDSTORMS NXT robotics kit (OMK Tech Discovery Tool Kit; 1 per 6 youth maximum)
- Engineering Notebooks (found at the end of the activity plan; copied as instructed)
- A healthy snack for all participants

Closing & Cleanup:

- Optional: iPad 2 (OMK Tech Discovery Tool Kit) or a digital or video camera (Mobile Technology Lab)

Day of the Event

Roles for Uniformed Service Member:

- Help youth identify and form a positive connection with another Service Member
- Encourage youth to ask questions about the Deployment Cycle
- Talk about how you or others used robots during your deployment
- Share your personal stories about being part of a team and visit with youth about how they could be better team members

Roles for Volunteers:

- Help youth with all activities and form a positive connection with the youth
- Provide positive support for youth throughout the activities
- Assist youth in setting positive goals
- Model problem-solving strategies
- Facilitate problem solving and use teamwork when youth become frustrated or have questions
- Assist with setup and cleanup

Before the Youth Arrive….

1. Orient your group of volunteers to the activity (make sure they all have nametags and introduce themselves to each other before you get started).
2. Have Tech volunteer make sure that the LEGO MINDSTORMS NXT software is installed on all laptops and that the lead volunteer's laptop is working with the LCD projector for demonstration purposes.
3. **Activity Orientation for All Volunteers** (online/phone call):
    - Discuss **inquiry learning** and how it can be applied to the discussion of the targeted Life Skills of communication, problem solving and teamwork
    - Share and review "The Process of Inquiry" chart
    - Review each activity
    - Cue volunteers where to look for the Life/Resilience Skill objectives in the directions and remind them of the importance of discussing these things during the activity; remind them how these will help youth manage deployment issues and adjustments
    - Have volunteers help set up for the event

Set up Your Space:

Space: You will need a large room with open space, at least 1 table for each 2 teams (3-6 youth per team), access to electrical outlets for each group and chairs for youth. Wireless Internet access is required for Optional Activity 2.

1. Post **Life/Resilience Skill signs** around the room.
2. Set up a greeting table with a sign-in sheet.
3. From 1 of the LEGO MINDSTORMS NXT robotics kits, select 4 different sets of 3 pieces that connect together. The pieces should be easy to identify. Set them out on the sign-in table.

Special Note Regarding Timing:
Activity 2 and Activity 5 are optional activities that will each take 15 to 20 minutes. For older youth, we recommend including these activities. But if your groups have a hard time getting their robots built and programmed in 60 minutes (Activity 1), then you should skip these activities to allow more time for the youth to take on the Obstacle Challenge Course (Activity 6).

WHAT TO DO **Robot Rovers**

As the Youth Arrive….

- Have youth and accompanying adult fill out the sign-in sheet and have participant(s) put on a nametag
- Have youth select 1 LEGO piece from the sign-in table for the Icebreaker activity.
- Don't forget to introduce yourself and your team of volunteers, the Uniformed Service Member and others that might be in the room, along with their roles

Icebreaker: **Find That Thingamajig (15 minutes)**

1. When you are ready to begin, have youth find the 2 other youth whose LEGOs will connect to theirs. This will be their team to work with today. (Adjust accordingly if you need to have larger teams.)
2. Have team members introduce themselves to each other.
3. Have a volunteer collect the LEGO pieces from each youth and return them to the kit they came from.

Preparing for the Game

1. Give each team a work area with a laptop and a complete robotics kit.
2. Each team should select LEGO pieces from their MINDSTORMS NXT kit (2 groups=4 pieces each; 3 groups=3 pieces each; 4 to 5 groups=2 pieces each; 6 or more groups=1 piece each).
3. As a team, youth will decide how to describe each piece to the bigger group.

Game Play

1. One team comes to the front of the room and hands the LEGO they are describing to a volunteer, making sure to keep it out of view of the bigger group.
2. The team introduces themselves to the group.
3. When the time starts, the team will describe the piece as quickly and clearly as they can.
4. Set timer to 1 minute.
5. As each team describes their piece, the other teams try to be the first to find that piece in the kit on their table and hold it up.
6. Continue the game play until each team has described their pieces.

Optional Extension

The lead volunteer can describe the LEGO language and give names to specific pieces. It is particularly helpful for youth to know how to describe how long an axle piece is.

Debriefing Questions:

- Were there any pieces that we could not describe?
- Which pieces are the easiest to describe?

- Which pieces are the most difficult to describe?
- What makes a good description?
- What did you find most helpful in being able to communicate effectively something new to someone?
- What kinds of things are easy to talk about with friends (food, weather, etc.)?
- What things are more difficult to talk about?
- How does this activity remind you of the challenges you face while your Service Member is deployed?

1. *"Sometimes during deployment, it may be hard to name all the things that are affecting your life. You may not have the words to describe what you are feeling, but others can help. Through OMK, you may learn some new words or ways to describe what you are going through that will make it easier for you to share with your Family how you feel or what you need."*
2. Hold up and identify key LEGO pieces and components so that everyone can see them.
3. *"How do you use robotics in your daily life?* (Ask for examples.) *What about cars? Do you think cars will ever drive themselves? Are we almost there? What kind of robotics would you need to have a car drive and park itself?"*
4. Make sure all LEGO pieces and components are returned to the kits they came from.

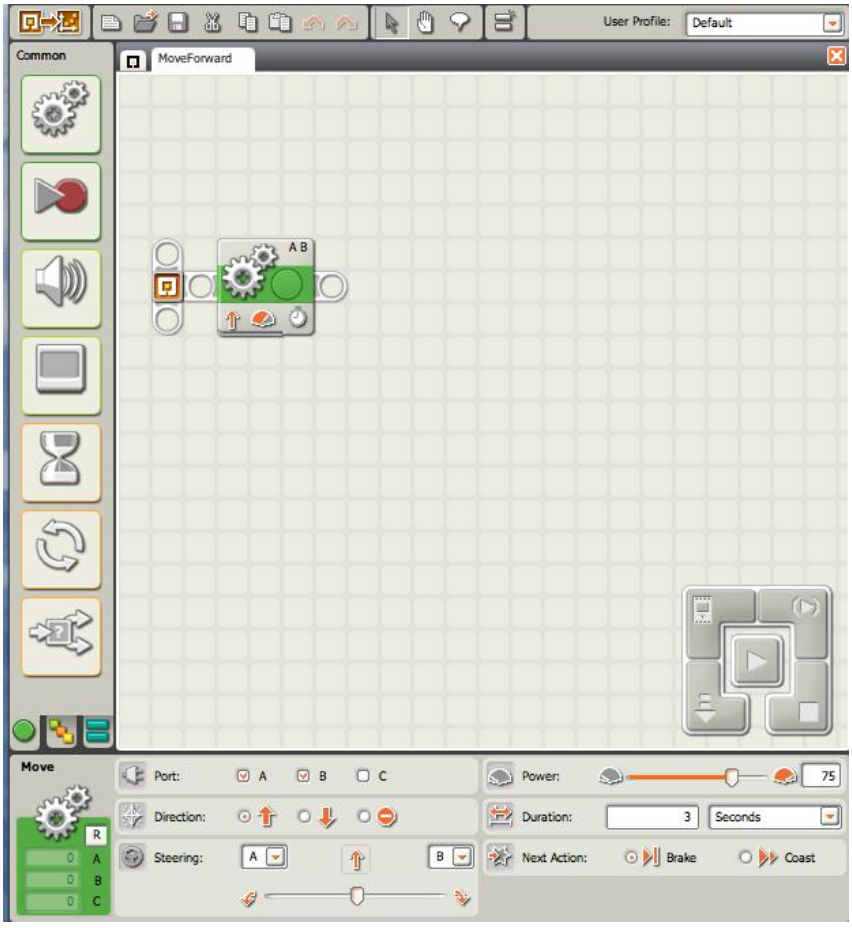
Activity 1: **Build a Robot Rover (60 Minutes)**

Demonstrating the Program

"You are going to follow the instructions in your Engineering Notebook to build a robot rover. You'll start by locating the pieces you need, and then follow the instructions to put them together. When everyone has their rover ready, we'll learn how to make it move. There are just a few simple rules to help you keep your kits together:

1. *First, make sure your hands are clean before you use the kit or laptop.*
2. *Use only the pieces in your kit to build your rover; do not borrow a piece from another kit. When you're not using your kit, put the lid on so no pieces get lost.*
3. *Finally, always be sure the robot is on the floor before you run a program – never run the program when the robot is on the table or connected to a laptop.*
4. *We are handing out Engineering Notebooks that will allow you to sketch out design ideas and programs and record what works or what doesn't work. It will be helpful to use it to keep track of your progress."* Hold up and show some examples.
5. *"Now let's begin building your robots."*
6. Youth should follow the building instructions found in their Engineering Notebooks.
7. Volunteers should circulate to help teams as needed.
8. As groups finish, remind them to put the lid on their kit and set it aside so they can work on the laptop.
9. Demonstrate opening the MINDSTORMS NXT software and creating a new program using the LCD projector; have teams follow along on their laptops.

10. "*Now that you have a robot, the next step is to make it move. To do that, you will have to write a program.*"
    a. Open software
    b. Enter program name "Move Forward" and click on "Go"
11. Select the "Motor" command and drag it to the program sequence beam.
12. Point out to youth each of the options they can change in the motor command:
    a. Select the correct port for each motor on their robot
    b. Direction can be forward, backward or stop
    c. Steering can be used for center-pivot turns (like a ZTR or zero turn radius mower)
    d. Power has some impact on how fast the robot moves and how fast the batteries wear out; for most of the time, 75% power is good
    e. Duration can be to move for a set time (seconds), number of rotations of the motor, number of degrees (360 degrees = 1 rotation) or unlimited (which isn't really unlimited – 2 seconds)
    f. The next action when your robot is done moving can be to coast to a stop or to brake
13. *"To start, let's all try to set our robots to move forward for 3 seconds. What parameters do you need to change?*"
14. Allow youth to tell you what changes need to be made; demonstrate making the changes as they describe them.



Using the Program

1. To get the program from your laptop to your robot, you need to download it.
   a. First you connect the robot to your laptop and turn it on
   b. Then you select the download button (down arrow in lower right corner)
   c. Do NOT select the play button (right arrow); the robot will begin to move right away, which can be very bad for your robot
2. Youth download the program, disconnect the robot from the laptop, and set their robot on the floor.
3. Youth can now run their program.
4. Here is your first challenge: make your robot move forward, then turn right.
   a. To accomplish this challenge, youth will have to use 2 motor commands, 1 to move forward, and another to turn
   b. There is more than 1 solution that will work
   c. If you have 1 or 2 teams that accomplish the challenge before the others, then you can use the following progressive challenges to keep them engaged; as they complete a challenge, give them the next:
      i. Move forward and then turn right
      ii. Make a right angle turn (90 degrees)
      iii. Make a square
      iv. Make a figure 8
5. When everyone has figured out how to make the robot move forward and turn, then it is time to move on to the next activity.

Optional Activity 2: **NASA Rovers (15 Minutes)**

"We're going online to look up NASA's rovers. What would a rover need to navigate on another planet? You'll have 5 minutes to find 1 fact about the rovers, then you'll share it with the rest of the group."

1. If teams are using the iPad 2 devices to go online, then first review the **iPad 2 Rules and Regulations** (read the following out loud and then ask youth for examples of what NOT to do):
   - Handle with care
   - Use 2 hands at all times
   - Keep it clean
   - If you break it, you buy it ($500.00)
2. Give youth 5 minutes for research.
3. Encourage each team to briefly share what they find with the bigger group.
4. Some ideas they may come up with for what a rover needs might be: wheels or legs, a renewable power source, sensors or other ways to collect data and navigate.

Activity 3: **Making Sense of Sensors (15 Minutes)**

"Your rover is going to need sensors, so look in your kit for a sensor that looks like it could 'see' objects in front of your robot. As a team, you'll decide how to attach the sensor to your robot, then we'll learn how to use it."

1. Youth will find and attach the ultrasonic sensor (this is the sensor with 2 circles on the front); each team will come up with their own way to attach the sensor.

2. *"It's okay to be creative, but each sensor needs to be connected to 1 of the ports (1, 2, 3, 4) with a cable. Then close your kit and set it aside."*
3. *"The ultrasonic sensor doesn't actually see – rather, it uses sound in the same way a bat does to detect objects: sonar."*
4. To help youth understand how the sensor works, they will view data input from the sensor.
5. Demonstrate how to view data input from the sensors:
   a. Starting with "My Files" on the screen, use the arrow keys to scroll to "View," then use the orange button to select
   b. Use the arrow keys to scroll through the sensor options to "Ultrasonic Inch," then use the orange button to select
   c. Check which port the ultrasonic sensor is connected to and select that port
6. Place an object a few inches from the sensor and use the sensor to determine how far away it is; experiment to see how the output changes as the object or the robot moves.
7. *"Here's a challenge: Can you find a 'blind spot' where the sensor cannot detect an object in front of it? Experiment for 2 to 3 minutes, then share your findings with the rest of the group."*

Debriefing Questions:

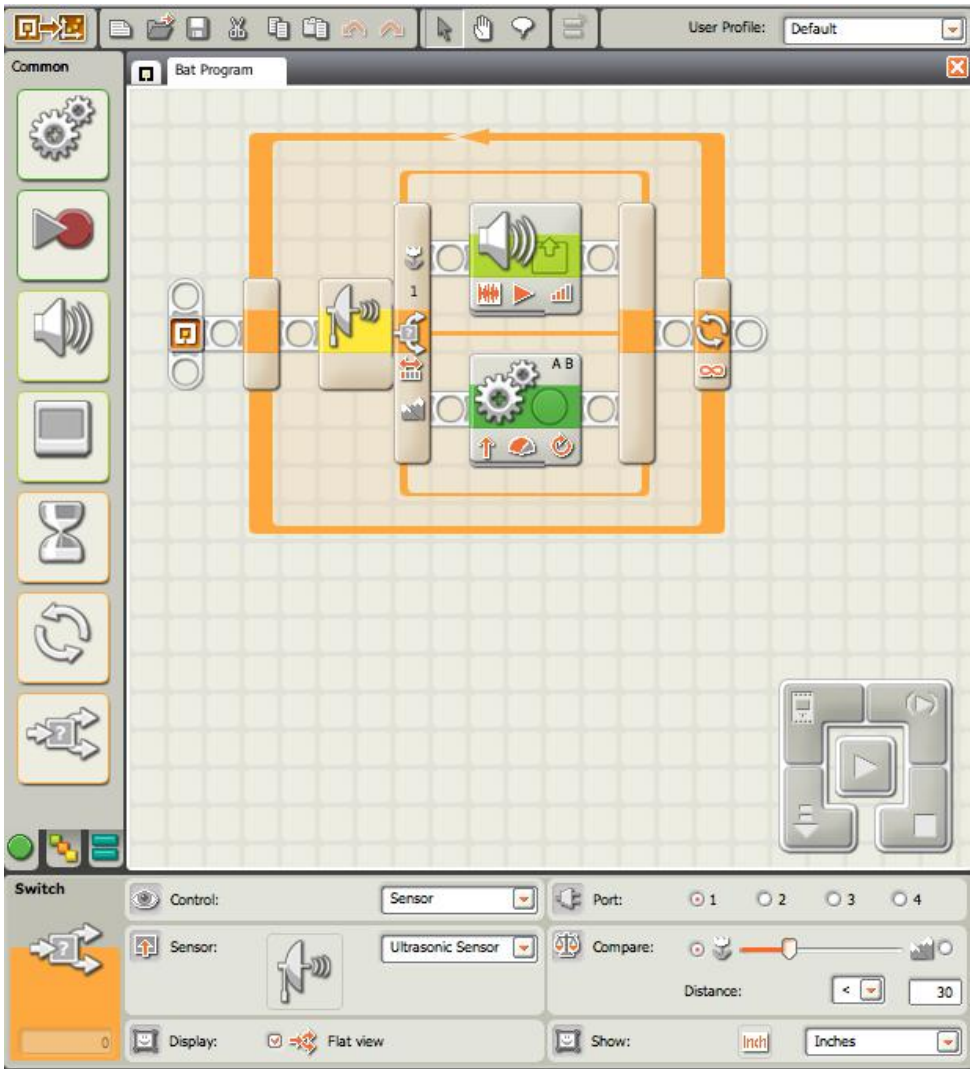
- What surprised you about the ultrasonic sensor?
- How did you work together as a team to figure out how the sensor works?
- What did you learn from other teams about how the sensor works?
- So far today, you have built a robot, learned how to make it move, added an ultrasonic sensor to your robot and figured out how the sensor works. But you've also been working on your teamwork and communication skills. What have you learned about being part of a team?
- What could you do to be a better team member? (brainstorm and record ideas on a flip chart)
- Record in your notebook 2 ideas about being a better team member that you will work on today

Activity 4: **Bat Game (20 Minutes)**

"We're going to use our robots to play a game that will help you better understand how the ultrasonic sensor works. First you'll write a simple program for your robot, then we'll play the game."

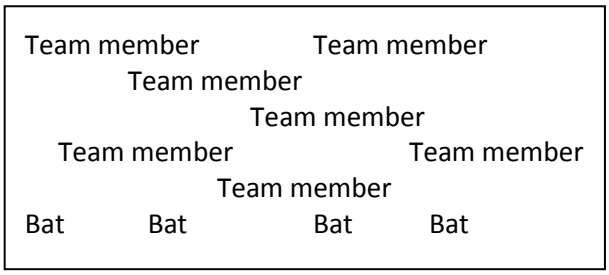
1. Open the NXT software on your laptop and start a new program for the Bat Game. This program will have 3 new parts: a loop, a switch and a sound. (The leader will demonstrate the steps on the LCD projector as youth follow along.)
2. First select a loop command and drag it to the program sequence bar. A loop will tell your robot to do the commands inside again and again. The default will tell it to keep doing the command forever.
3. Then select a switch command and place it inside the loop. In the parameters for your switch command, select an ultrasonic sensor. Select the port your sensor is connected to. Set the distance to 30 inches.

4. A switch is like an "if – then" statement. We will fill in what we want the robot to do. If it detects an object less than 30 inches away (< 30), then we want the robot to give a warning, so select a sound command and drop it into the top choice in the switch. Decide what sound you want your robot to make.
5. If no object is detected, we want the robot to signal you to "move," so select a motor command, place it in the lower part of the switch and set it to move the motors 3 rotations.



6. Now save and download your program to your robot.
7. *"Now it's time to make a plan for how your team will play the 'bat' game. Each team will select 1 person to be the 'bat.' The bat will use the robot's ultrasonic sensor to detect objects. But the program we just wrote doesn't tell the bat what to do when an object is detected. That's where your team comes in. You need to create a plan or program for your bat to follow."*

8. *"The first part is simple. When the robot's motors are moving, the bat should move forward with the robot (but not too quickly)."*
9. *"When the robot sensor detects an object, the bat should stop. You'll notice the robot does not stop and collides with the object."*
10. *"What happens next is up to your team. You need to create a programing plan for your bat to avoid the object and keep moving. For example: forward 2 feet, object detected, turn right 1 foot. This can be translated to an 'if then' statement. If object is detected, then turn right. This is your step 1 for the course. Questions?"*
11. Answer youth's questions and demonstrate the process.
12. *"The goal is to get your bat across the room without colliding with any objects. Make a plan before you start and write it in your Engineering Notebook."*
13. As the teams create their plans, begin to set up the room for the real Bat Game. There should be an open space at least 15 feet wide for the bats to navigate.
14. During the game, the other team members will spread out around the space and be objects for the bats to avoid.
15. *"Every time there is a change in the program you have to pick up your robot, take it back to the laptop for additional programming and then return to the game area and start again."*
16. Be sure at the beginning that each bat has at least 1 object in front of them. Each team will create different programs depending on where they start. The goal would be to have the robot get across the room without a collision.



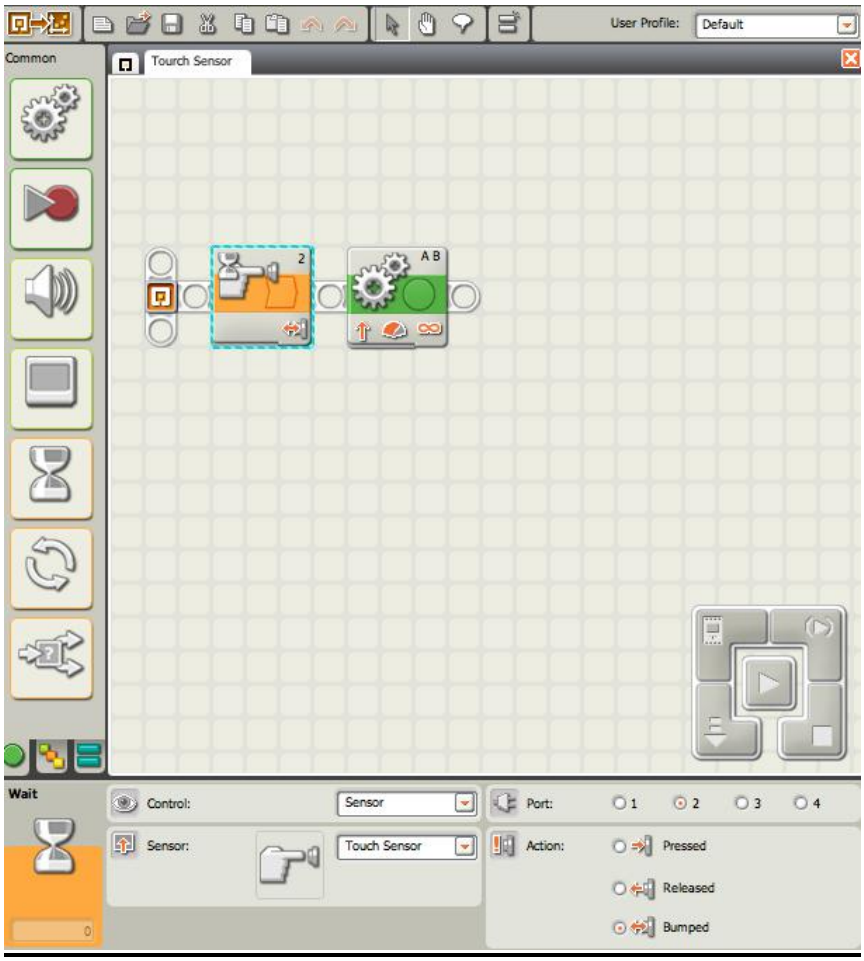
17. Play the game, then stop and discuss briefly with the group:
    a. What happened?
    b. What worked or did not work well in your program?
    c. How could you improve your program?
18. If time allows, you can play the game again with each team using a revised program and a different bat. Or, have each team exchange their program with another group and test someone else's program.
19. While the group is playing the Bat Game, have one volunteer set up an obstacle course for the robots. The space should be about 5' x 5' with a clear start and finish area. Obstacles inside the course should have flat sides that the robots can detect (small boxes or 3-ring binders work well).

Optional Activity 5: **Touch to Start – Touch to Stop (20 Minutes)**

The diagram for this activity is on the next page.

"Now let's go back to the kits and find the sensor that can be pressed and released. This is the touch sensor." (Have youth open their kit and locate this sensor.)

1. *"This sensor is very different from the ultrasonic sensor. What does the data from the ultrasonic sensor look like?"* (Youth may describe the data in different ways: the unit is inches or centimeters, there is a range of data from about 6 inches to 120 inches, when the sensor can't get good data, the output is ????.)
2. *"There are only 3 options with the touch sensor. It reads 'pressed,' 'released' or 'bumped' (pressed and released). As a team, discuss how you could use the touch sensor on your robot. How would you attach the sensor to your robot? Where would it go? What would the programming be?"* (Keep the discussion short, 3 to 6 minutes, then have each team attach the sensor to their robot.)
3. *"Now let's start a new program called touch sensor."* Demonstrate on LCD projector and have youth follow along as they create the simple program:
   a. *"Start with a 'wait for touch sensor' command and put it in the program sequence bar.*
   b. *"What port is your touch sensor connected to?*
   c. *"Select 'bumped' for the action.*
   d. *"Now select a 'move' command and move it to the program sequence bar.*
   e. *"What ports are the motors connected to?*
   f. *"Set the motors to 'move forward unlimited.'*
   g. *"Now save and download your program."*
4. *"What do you think this program will do?"* (Have youth share their ideas: When they run the program, it will seem like nothing is happening. When they bump the touch sensor, the motors will start. The motors will run for about 2 minutes.)
5. *"Let's try it out."* (Give youth a few minutes to experiment with the program, then gather everyone back together to introduce the Obstacle Challenge Course.)
6. Keep a close eye on the time: you need about 95 minutes for the remainder of the day's activities: the Obstacle Challenge Course, Snack and Summit plus time to clean up.



Activity 6: **Obstacle Challenge Course (40 Minutes)**

"When you first arrived today, you probably would have been stumped if I had set up this challenge course and said you have 20 minutes to prepare your robot to complete the course. But now you have the skills you need to accomplish this task. Talk with your team, then decide what you need to do. What will your strategy be? Do you need to make any adjustments to your robot? How will you program your robot? Remember that programming instructions should be simple, precise and specific."

1. Allow teams 20 minutes to work on their programming. Give a warning when 10 minutes have passed and when 15 minutes have passed to help the group stay on track.
2. Have the volunteers move around and visit with teams to see if they are having problems; volunteers can also use the camera on an iPad 2 device or the digital or video camera to take photos of each team that can be emailed to the youth after the event.
3. Encourage teams to test their robot on the challenge course during the planning phase.
4. Direct teams that are finishing up ahead of the others to the blank page at the end of their notebooks. They can begin taking notes to help prepare for the Summit presentation in their Engineering Notebook.
5. After 20 minutes, draw the entire group back together to support and encourage everyone as they test their robot on the Obstacle Challenge Course.

6. Remind youth of respectful behavior (if needed) and model applause after each robot's attempt to complete the challenge course.

If you have more than 70 minutes remaining as the teams complete the Obstacle Challenge Course, then allow each team to design a challenge course for others to try.

Activity 7: **Snack and Summit (40 Minutes)**

1. Gather all the teams together for the Summit; if they wish, they may bring their robot and their Engineering Notebooks with them.
2. Let the teams get their snacks as they gather; they can eat their snack during the Summit.
3. Allow the youth to take leadership in the Summit as they share their results.
4. Have a volunteer take notes during the Summit.

"An important part of engineering and science is sharing what you've learned with others. At the Summit, you'll have an opportunity to tell the rest of the group about your robot's design and performance: what worked and what didn't work. An important part of engineering is testing a design and improving it. Each team will have 2 minutes to share their robot design and performance."

1. If possible, let a team volunteer to be the first presenters.
2. Each team's presentation should be brief (2 to 3 minutes); they can use their Summit presentation notes in their Engineering Notebooks.
3. Remind youth of respectful behavior (if needed) and model applause after each robot's attempt to complete the challenge course.
4. Have all teams make their presentations.

Talk It Over

1. To help you focus the discussion, briefly look at Life Skill, Resilience Skill and Science and Technology Objectives on page 1.
2. Lead the entire group through the Talk It Over discussion.
3. Remember to include the Uniformed Service Member in the discussion.
4. Have a volunteer take comments/notes about group dynamics and specific youth comments.

Share/Reflect

- For how many of you was this your first experience in building and programming a robot?
- What did each member of your team contribute?
- What surprised you about working together on your team?
- How did you communicate with your teammates in a positive manner?
- How can precise and specific communication help you improve communication during mobilization?
- How did you feel when your robot worked for the first time?
- How did you feel when it finished the course?

Process

- What design features or strategies made robots more successful in the challenge course?
- Did you like the robot assembly process? What about the programming?
- If you were to do this again, what could you do to make the process go more smoothly?

Generalize

- How can understanding different types of communication help you understand others in your Family or community in a positive and productive way?
- What can you do to improve the teamwork in your Family to help with solving problems and conflicts?
- Working towards a common goal is important; how can you help with goals in your Family?
- Good communication skills can help you build stronger relationships with your Family members; what communication strategies were most effective within the teams here today in meeting this challenge? Are there ways you can apply these strategies within your Family?

Apply

- What are some of the challenges that you face in life? How can you be adaptable and find solutions to your challenges?
- Your Family is taking on challenges that are much bigger than this obstacle course, but are there ways you can apply what you've learned today to the challenges your Family faces during mobilization?
- Can you think of places where robots will be used in the future?
- Would you like to be an engineer or a robot designer? What steps would you have to take in school right now to get to your goal?
- Why is it important to have goals as you and your Family go through the Deployment Cycle?

Debrief Youth on Life/Resilience Skills:

Point to the Life/Resilience Skill signs that are posted around the room:
Communication, Problem Solving, Teamwork, Social and Family.
As you point to each sign, ask:

- How have our activities today helped you develop your _____ (skills)?
- Why do you think these skills are important?

Closing & Cleanup: **(15 Minutes)**

"Each team has built and programmed a robot today. We've also learned about communication, teamwork and how these skills can help our Families be more resilient during deployment. Thanks for coming, and be sure to take your Engineering Notebook and a parent letter home with you."

(If you are going to take photos, add) *"We're going to have a volunteer come around and take a photo or video of each team with your robot. While you're waiting, please clean up your work area. Once your photo has been taken, you can disassemble your robot and put it away as well."*

Volunteers can use the camera on an iPad 2 device or the digital or video camera to take photos of each team that can be emailed to the youth after the event.

Extend the Activity:

- In advance, invite parents and other adults to come for a brief demonstration of the robots at the end of the event. Each team will demonstrate how their robot performs on the challenge course in the "Robot Rover Showcase." Volunteers will need to plan for extra cleanup time in this case.

Post Event

Lead Volunteer:

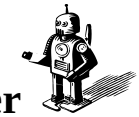
- Check to make sure that the space is clean and returned to the arrangement it was in prior to your arrival
- Inventory and put all equipment and supplies back into their respective kits and pack them up to return as directed; make sure all iPad 2 devices, connecter kits, cords and power chargers are returned to the OMK Tech Discovery Tool Kit
- Fill out report:
  - Names of all volunteers
  - Number and names of youth (attach sign-in sheet)
  - Quotes from youth about activities
  - Other important notes on activities, volunteers and youth
  - Critical follow-ups (parents about behavior/worries about a particular youth, inappropriate language from a volunteer, etc.)
  - Indicate if there are videos, photos or other content that needs to be forwarded to youth/Family; make it clear which items go to each youth/Family

Activity Developed for OMK Tech Discovery by:

Saundra Wever Frerichs, University of Nebraska – Lincoln, Science and Technology Specialist
Wendy Rubinyi, Instructional Design Specialist (rubinyi.com)

The OMK Tech Discovery Curriculum was developed at the University of Minnesota Extension Center for Youth Development through a partnership of the Department of Defense, Office of the Secretary of Defense, Military Community & Family Policy, Office of Family Policy/Children and Youth and the United States Department of Agriculture, National Institute of Food and Agriculture, Institute of Youth, Family and Community, 4-H National Headquarters under Kansas State University special project number 2010-48713-21882.

Robot Rover



Dear Family,

Today we put our engineering skills to work as we built and programmed robot rovers. We followed design plans to build a rover, and then created our own designs for adding sensors to the robot.

We learned why it is important to be specific and precise when we are communicating with a robot. Then we thought about how this might help us in communicating with our Family as well.

Your youth also worked on developing teamwork skills by working within small groups. They practiced communication skills within their groups and learned to communicate with a robot through visual programming. We discussed how using precise and specific communication can help alleviate conflict and improve communication with Family members.

Practicing good communication skills, exchanging ideas with others and working toward a common goal builds resilience in your youth. Resilience is critical for successfully getting through all the stages of deployment.

We also worked with the engineering design process. Youth actively solved problems using the inquiry method with their robot programming. These skills can also be used to solve other problems in life, especially in the mobilization stage of deployment.

Building and programming a robot may have been something completely new to your youth, and may spark some interest in a career in engineering or programming. We encourage you to talk with your youth about the Robot Rovers experience and the effect it has on their life, and share that discussion with your Service Member.

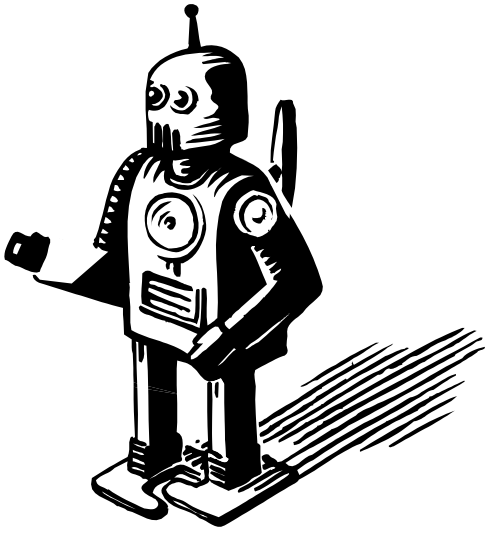
Thank you for your support and for helping your youth participate in this OMK Tech Discovery experience!

Best regards,

Conversation Starters:

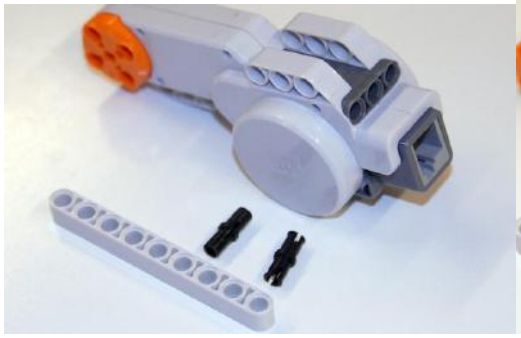
- Who is your favorite movie or TV robot?
- What robots do you think we have in our home?
- How do robots make your life easier?
- Have you ever thought about being an engineer? What kind of engineer would you be?
- Would you want to be part robot? Why or why not?

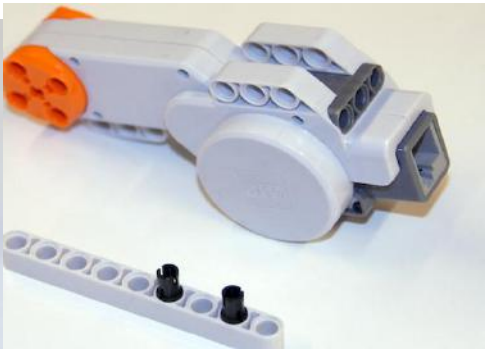
Robot Rovers
Engineering Notebook



Build Plans for the Robot Rovers

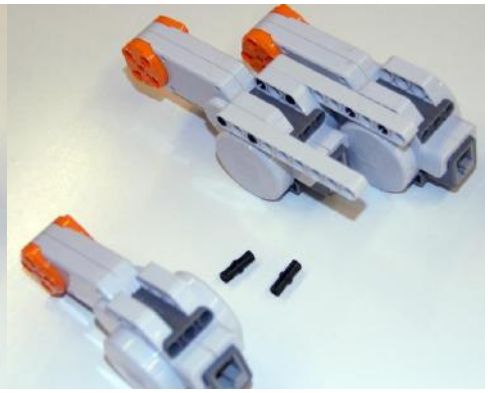
Build the Wheel Base

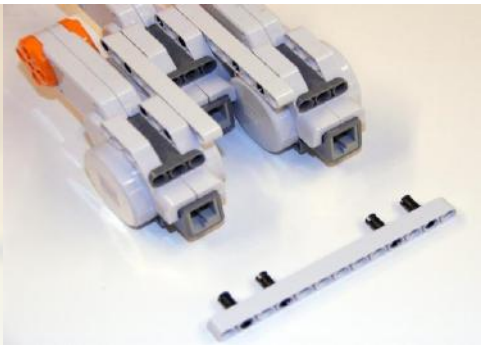


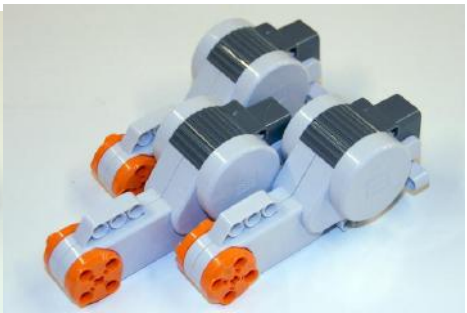


Build the Wheel Base



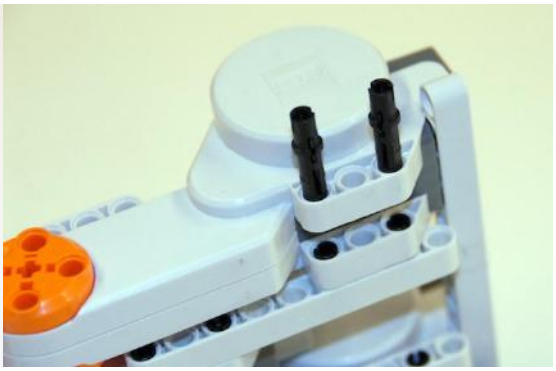





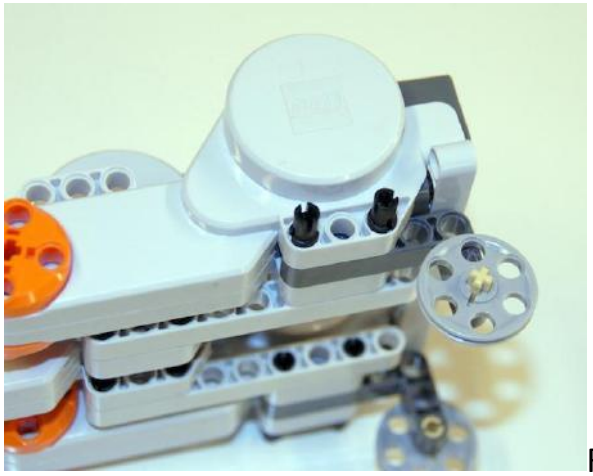


Add Rear Wheels

Use tan pin for easy rotation

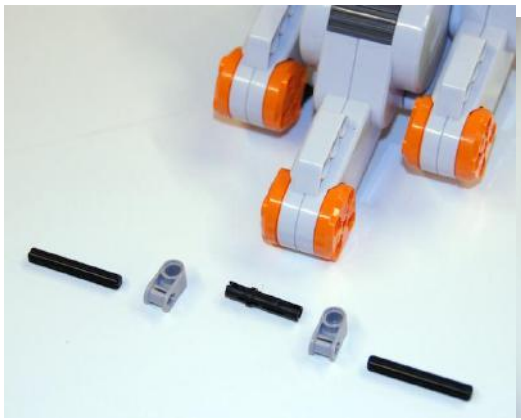


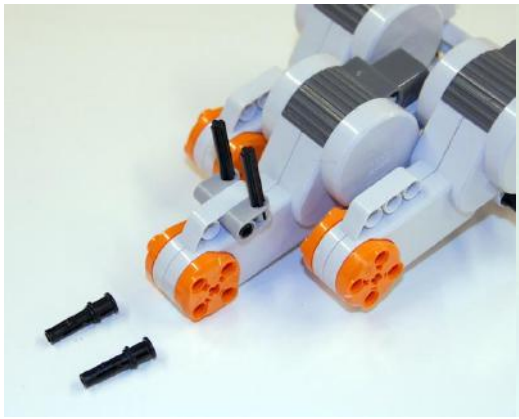
These black pins are long

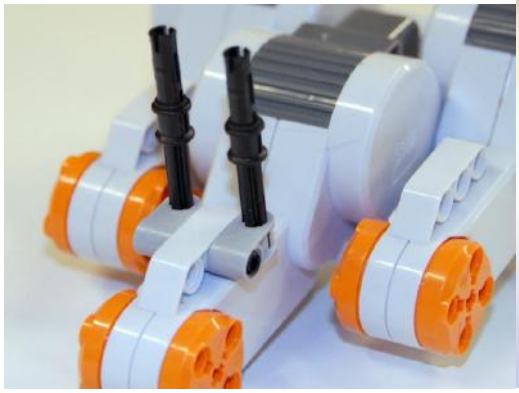
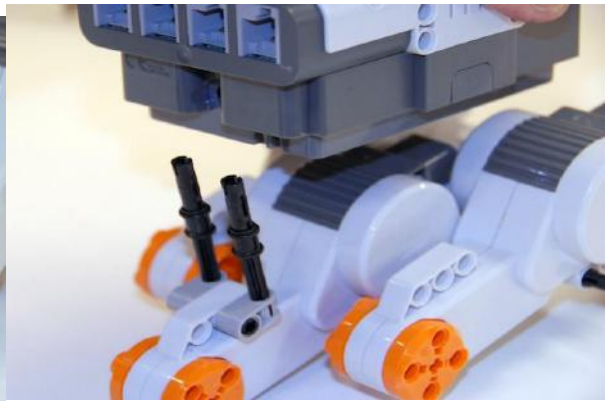


Repeat steps on other side

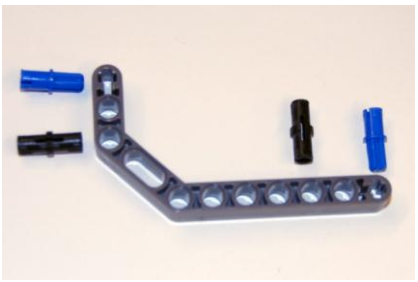
Mount NXT Brick





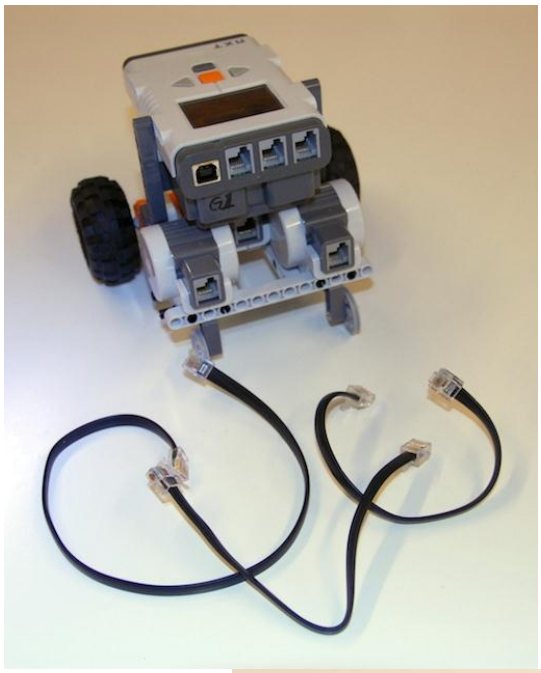
Mount NXT Brick and Drive Wheels



Repeat on other side

Mount an axle, inner nut and wheel on each left and right motor (we will use the middle motor later)

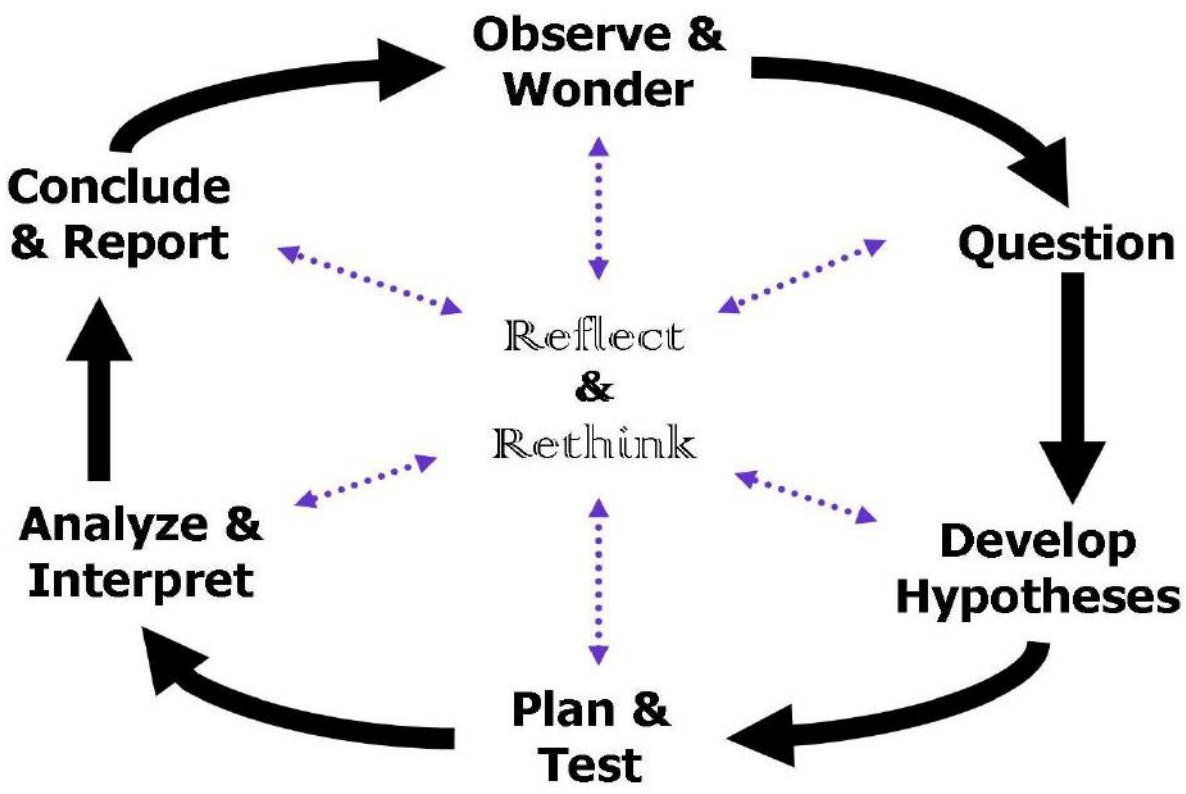
Route cables from the motors to the NXT brick



IDEA: try connecting the left and right motors to ports B and C and the middle motor to port A

Andrea Lorek Strauss, Extension Educator, University of Minnesota Extension, astrauss@umn.edu

THE PROCESS OF INQUIRY



Scientific discoveries are made through the process of inquiry, though scientists often use the word "research" or "the scientific method" to describe what they do. Inquiry involves detailed examination of phenomena with the goal of discovering and interpreting new knowledge, whether the knowledge is new to human-kind, to a small group of people, or even just to the person doing the research.

FACILITATOR SKILLS THAT FOSTER INQUIRY

Inquiry is learner-driven, not teacher driven, so the instructor must take a back seat to his or her participants' curiosity. The instructor simply facilitates the learning process. Facilitating inquiry experiences requires flexibility, patience, tolerance of ambiguity, and an emphasis on student skill building. When learner-driven inquiry takes place, the instructor becomes a learner, too. And not just in the content area, but by gaining a deeper understanding of his/her students' thinking processes as well as the process of inquiry itself.

Threaded Thoughts

Time Needed: 4 Hours
Skill Level: Basic
Number of Youth: 12
Deployment Segment: Mobilization
Internet Required: Yes

Life Skill Objectives:

- **Communication:** Develop skills to express yourself through multiple mediums to better communicate with Family and friends during deployment
- **Self-responsibility:** Make decisions related to what is appropriate to post when using social networking tools and learn about the potential impact social media can have on your safety and your future

Resilience Skill Objectives:

- **Emotional:** Exchange ideas, views and experiences as well as find opportunities to nurture positive emotions towards your Service Member during mobilization
- **Social:** Develop and explore individual and community social connections that will help you maintain trusted, valued relationships and friendships
- **Family:** Understand how Family communication and interactions change after deployment and how communication tools can help you maintain Family relationships throughout deployment
- **Spiritual:** Explore issues related to beliefs, principles and values in regards to Internet safety skills and what is appropriate to share through social media

Science and Technology Objectives:

- Understand the issues involved with online safety (what **can** be shared online, what **should** be shared online and **when** anything should be shared) in relation to personal safety, Family emotional safety and Military safety
- Explore VoiceThread as an online resource that may be used to keep your Family connected and engaged during deployment

Activity Overview:
Youth will learn about online security and how to keep their Family safe while using online resources. Youth will also be introduced to VoiceThread and will learn to use this discussion tool to communicate about activities and share Family happenings with Family at home and Service Members who are deployed.

Shout Out to Youth!
Learn how to use VoiceThread! This unique interactive online tool combines images, audio and graphics so that you can share important people and events with your Service Member. Bring digital photos or video on a data stick from home to get started!

Prerequisites: None

Breakdown of Activities:

Icebreaker	Security Breach	(40 Minutes)
Activity 1:	Operational Security	(20 Minutes)
Activity 2:	Introduction to VoiceThread	(40 Minutes)
Activity 3:	Explore VoiceThreads	(30 Minutes)
Activity 4:	Create Your Own VoiceThread	(70 Minutes)
Activity 5:	Talk It Over & Snack	(30 Minutes)
Closing & Cleanup		(10 Minutes)

Budget Range for Activity:

$3/youth for supplies and snack plus an additional $15 for a 1-month K-12 VoiceThread Class Subscription

Space Needed:

You will need a room with enough tables, chairs and outlets to have 12 laptops set up comfortably, as well as a large uncluttered area for a group activity. Wireless Internet access is required for this activity.

Before the Event

Get Ready:

Tasks for Lead Volunteer

- Do Volunteer Training with the additional OMK Tech Discovery training (found at: http://www.4-hmilitarypartnerships.org/p.aspx?tabid=187)
- Review the activity, all materials and handouts

Do Ahead:

In coordination with the Military Point of Contact:

1. Schedule use of the OMK Tech Discovery Tool Kit. (If you anticipate a large group of youth, schedule additional OMK Tech Discovery Tool Kits. 1 Kit=12 youth.)
2. Schedule use of Mobile Technology Lab.
3. Ensure Internet access.
4. Schedule Uniformed Service Member and at least 1 volunteer per 3 youth to participate in the activity.
5. Contact volunteers and go through online training (to learn more before you show up about OMK and OMK Tech Discovery).
6. Order Glo Germ Gel: http://glogerm2.hostica.com/mm5/merchant.mvc?Screen=PROD&Store_Code=GG&Product_Code=GGG8O&Category_Code=PGAOL ($18.95).
7. Watch an introductory "how to and features" demonstration of VoiceThread: http://voicethread.com/share/409/.
8. Watch the VoiceThread introductory video specifically designed to help you for this OMK activity at: http://voicethread.com/share/2312177/.
9. If you can get the names of the participants ahead of time, it will make it easier to setup and create a VoiceThread K-12 Class for your event.
10. Coordinate and get 12 unique and approved OMK user names and passwords for use during the activity if you do not know the names of the participants. These do not need to be email addresses.
11. Open a K-12 VoiceThread account and pay $15 for the 1-month K-12 VoiceThread Class Subscription at http://voicethread.com. Select:
    a. The "Products" tab
    b. K-12 (only the K-12 account has the security features approved for this activity)
    c. Single educator
    d. Class subscription
    e. Add OMK user names or the names of the known participants to the VoiceThread Class
    f. Write down each unique user name and password on its own index card

12. Create an introductory VoiceThread for Activity 2:
    a. Upload a picture of your choice or record yourself with a video camera
    b. Say something like: *"Hi. Welcome to VoiceThread. We'll be using this a lot during our time together, starting with introductions. You'll write something into this VoiceThread as a way of introducing yourself to others. But remember to leave off your name so we can guess who you are. Click 'Comment' down below and then the 'Type' button. Tell us about things you like to do, favorite music, pets you may have and other stuff to help us get to know you."*
13. Find interesting VoiceThreads at voicethread.com to share with youth for Activity 3 (since VoiceThread is also used in activities related to the reintegration stage, there may be some OMK threads out there to look at and comment on).
14. Recruit a Tech volunteer (for device, laptop and Internet support) and to help with entering users and using VoiceThread at the event.

Copy:

- Sign-in sheet (OMK Tech Discovery Tool Kit)
- "How to Make a 'Thread'" handout (3 pages found at the end of the activity plan; copy and staple 1 set per youth = 12 sets, ideally copied in color)
- Parent letter (1 per youth = 12 copies)

Get from OMK Tech Discovery Tool Kit:

- 4 computer headsets with microphones
- Laminated Life/Resilience Skill signs to post around the room (Communication, Self-responsibility, Emotional, Social, Family and Spiritual)
- Sign-in sheet
- Nametags
- Writing utensils
- UV (ultraviolet) light (also called a black light; put it in a paper or plastic bag so that youth don't see it before they are supposed to and guess the secret of the Icebreaker)
- Timer

Get from Mobile Technology Lab:

- 10 Laptops
- 10 webcams if not integrated into the laptops
- 4 computer headsets with microphones
- Wireless router with Internet connection
- LCD projector
- Extension cords/power strips if needed

Buy or Borrow Supplies

Icebreaker: Security Breach

- Glo Germ Gel: http://glogerm2.hostica.com/mm5/merchant.mvc?Screen=PROD&Store_Code=GG&Product_Code=GGG8O&Category_Code=PGAOL ($18.95 plus shipping and taxes)
- Nametags for all youth, volunteers and anyone else who will be present (OMK Tech Discovery Tool Kit)
- Table for sign-in sheet
- Sign-in sheet (OMK Tech Discovery Tool Kit)
- Writing utensils (OMK Tech Discovery Tool Kit)
- UV (ultraviolet) light (also called a black light; available in the OMK Tech Discovery Tool Kit)
- Paper or plastic bag to keep the UV light hidden until it is time for its "reveal"
- Timer (OMK Tech Discovery Tool Kit)

Activity 1: Operational Security

- Flip chart
- Markers

Activity 2: Introduction to VoiceThread

- 12 laptops for youth (10 from the Mobile Technology Lab plus you must find 2 additional)
- Computer for OMK lead volunteer to use with LCD projector
- Wireless router with Internet connection (Mobile Technology Lab)
- External computer speakers that work with OMK lead volunteer's computer
- LCD projector (Mobile Technology Lab)
- Index cards with user names and passwords on them as instructed in advance
- Writing utensils (OMK Tech Discovery Tool Kit)

Activity 3: Explore VoiceThreads

- 12 laptops for youth (10 from the Mobile Technology Lab plus you must find 2 additional)
- Computer for OMK lead volunteer to use with LCD projector
- LCD projector (Mobile Technology Lab)
- Wireless router with Internet connection (Mobile Technology Lab)

Activity 4: Create Your Own VoiceThread

- 12 laptops for youth (10 from the Mobile Technology Lab plus you must find 2 additional)
- 12 webcams (10 should be available in the Mobile Technology Lab, either integrated into the laptops or in addition to them; you will need 2 more either integrated into the 2 additional laptops or available for use with them)
- 12 computer headsets with microphones (4 from the Mobile Technology Lab, 4 from the OMK Tech Discovery Tool Kit and 4 additional so there are 1 set per youth)
- Wireless router with Internet connection (Mobile Technology Lab)
- "How to Make a 'Thread'" handout (found at the end of the activity plan and copied as instructed)

Activity 5: Talk It Over & Snack

- Healthy snack and beverage choices

Day of the Event

Roles for Uniformed Service Member:

- Help youth identify and form a positive connection with another Service Member
- Encourage youth to ask questions about the Deployment Cycle
- Talk about how you stayed connected to your Family during a deployment; what tools or resources did you use?

Roles for Volunteers:

- Help youth with all activities and form a positive connection with the youth
- Provide positive support for youth throughout the activities
- Assist youth in setting positive goals
- Facilitate problem solving and use teamwork when youth become frustrated or have questions
- Assist the facilitator with setting up youth accounts in the VoiceThread environment.
- Assist with setup and cleanup

Before the Youth Arrive….

1. Orient your group of volunteers to the activity (make sure they all have nametags and introduce themselves to each other before you get started).
2. Have Tech volunteer set up Mobile Technology Lab, ensure Internet access and set up the lead volunteer's computer so that it runs with the LCD projector and the external speakers.
3. Look at voicethread.com and make sure you can access your account. Find 2 to 3 public threads to use during your explanation. You may want to find especially interesting threads, or threads where you as a facilitator can leave a comment.
4. Write the questions and the "Internet No-Nos" from Activity 1 on the flip chart so they are ready in advance.
5. **Activity Orientation for all Volunteers (**before the beginning of the event):
   - Review each activity
   - Cue volunteers where to look for the Life/Resilience Skill objectives in the directions and remind them of the importance of discussing them during the activity; remind volunteers how these will help youth manage deployment issues and adjustments
   - Have volunteers help set up for the event
   - Volunteers may want to also familiarize themselves with VoiceThread

Set up Your Space:

Space: You will need a room with enough tables, chairs and outlets to have 12 laptops set up comfortably, as well as a large uncluttered area for a group activity. Wireless Internet access is required for this activity.

1. Post **Life Skill/Resilience Skill signs** around the room.
2. Set up a greeting table with a sign-in sheet.
3. Set up tables with laptops on them.
4. Make sure the large open space is free of obstacles**.**

WHAT TO DO **Threaded Thoughts**

As the Youth Arrive….

1. Have youth and accompanying adult fill out the sign-in sheet and have participant(s) put on a nametag.
2. Use the information to add users to your VoiceThread Class. (http://voicethread.com/media/misc/K12ClassManagerGuide.pdf).
3. Don't forget to introduce yourself and your team of volunteers, the Uniformed Service Member and others that might be in the room, along with their roles.
4. Use the information to add users to your VoiceThread Class: (http://voicethread.com/media/misc/K12ClassManagerGuide.pdf).
5. If youth have the email addresses for loved ones or friends that they have permission to share, collect those as well. You may use them to safely share their VoiceThreads with others. Only you, as the "teacher" in the VoiceThread K-12 account, may do so.

Icebreaker: **Security Breach (40 Minutes)**

1. As the lead volunteer you will need to sneak the Glo Germ Gel onto 2 participants' hands as they initially arrive. You may just put a thick amount onto your hands and share a firm handshake with 2 youth to get the substance moving through the group. Once you have done this, wash your hands so you do not "infect" anyone else in the group.
2. Make sure that this activity is conducted in an area free from tables/chairs/cords and other obstacles, even beyond the perimeter of the group.
3. *"Security breaches are a growing problem, especially electronic security breaches. You can never be too careful with your data. Today we're going to demonstrate how easy it is for infiltrators to get through even the tightest of security scans. But first, let's see how good we are at creating a physical security barrier."*
4. Have youth form a circle and link hands.
5. *"Now that we've formed a circle, we need to have a volunteer to try to 'breach' the security."*
6. The volunteer goes into the middle of the circle.
7. *"Brave volunteer, clasp your hands behind your back. What's your name and where is your Service Member deployed?"* Wait for an answer.
8. *"Your mission is to break through the circle. You have 30 seconds. You may not use your arms and you cannot hurt anyone. This means NO running, NO headers, leaps, kicks or other hurtful attempts. This is not a defensive line for football. These are the rules of engagement. Hint: use your intelligence. ☺"*
9. *"Circle, you can move closer or farther apart to prevent the breach, but you may not let go of both the hands that you are holding onto now. You are also bound by the rule of engagement that you may not use your arms and you cannot hurt anyone."*
10. Set the timer and begin.
11. If there is time, let each of the youth take a turn in the middle. Switch it up by having youth switch their positions in the circle as well. Each attempt should get more and more sophisticated. Make sure all youth introduce themselves in the end, whether they get a chance to be in the middle or not.

12. *"Good job everyone! But… I've got some news for you. We've had a security breach, and it's bigger and more of a problem than those of you that were able to physically break or breach through. I have a device right here* (pull the UV/black light out of the bag) *that will show us the real security breaches that were happening right under our noses."*
13. Take the UV light out and shine it slowly and thoroughly on all the participants' hands, arms and shirts. You can also shine the light on the tables and furniture. You should find traces of the Glo Germ Gel on everyone and everything in the room.
14. *"Here's our security breach.* (Hold up the container.) *It's called Glo Germ Gel. When you arrived in the room, I shook some of your hands and set the security breach in motion. It was a simple and normal everyday thing. The Glo Germ Gel represents the infiltrators you never see when you're on the web. It's something we can't see except under the right light. Data breaches act just like germs. Unwanted data can attach to data that is not secure and carry things that can be dangerous to your computer, to your safety and to the safety of your Service Member."*

Debriefing Questions:

- How did you feel when you were able to secure the circle?
- How did that feeling change when you realized there was a breach in security that you had not seen?
- What could you have done differently if you had known about the Glo Germ Gel breach?
- How could you apply this activity to an experience with your Service Member?
- What could you do to protect yourself from invisible security breaches?
- How can you secure your data communications?

Give youth who are uncomfortable with having Glo Germ Gel on them time to clean up, but assure them it is harmless and will wear off and continue with Activity 1.

Activity 1: **Operational Security (20 Minutes)**

"How many of you have heard of OPSEC, or Operational Security, before? What do you think it means? We're going to talk a little bit today about OPSEC because we want to help keep you safe while staying connected with your Service Member. It's important for you to take OPSEC seriously because it will protect you and your Service Member."

1. *"During what activities do you think you need to be aware of OPSEC?"*
2. Write youths' answers on a flip chart *(possible answers: snail mail, phone calls, Internet, email, Facebook, photo sharing, etc.).*
3. *"What are some tips that will help keep you and your Service Member safe while using the Internet?"*
4. Lead youth through the questions you listed on the flip chart in advance and ask for their input:
    - Why is it important to your Family and Service Member to think before you interact online?
    - Who else can read or see what you post?
    - Do you want everyone to know everything?

- What can be spread without you being fully aware that it's public?
- Once it's out there, is it virtually impossible to erase something or get it all back?
- When you talk with your Family about Internet security, do they understand how to keep your Family safe online?

5. Internet No-Nos (also listed on the flip chart in advance):
   - Don't post personal information that would allow someone to find or single you out (for example: your full name, birthday, address, school, etc.)
   - Don't "friend" anyone you don't know on Facebook or other social networking pages
   - Don't post deployment information (for example: exactly where your Service Member is deployed, their deployment dates, Service Member's mission on deployment, etc.)
   - Don't post when you're going on vacation or when your parent/guardian will be away
   - Don't forget privacy settings: understand them and use them
   - Don't share your passwords; change your passwords often and keep password reminders in a safe place
6. "*Again, think before you share ANY personal information because you never know who's going to see it. Do you have any questions or comments about online security?"*
7. Answer any questions and ask your Uniformed Service Member for additional input.

"Today we'll be learning to use an online tool called VoiceThread. We hope you'll find this a useful tool for communicating with Service Members who are missing out on the things that are happening in your life here at home. While you use VoiceThread, think about security breaches and some of the OPSEC tips."

Activity 2: **Introduction to VoiceThread (40 Minutes)**

1. Show youth the introductory VoiceThread (that you made ahead of time as instructed) on the LCD projector.
2. Demonstrate how to add a comment either with their voice or words to your introduction.
3. Hand out an index card with their user name and password to each youth.
4. Ask youth to write their name at the bottom of the card.
5. Have youth locate a laptop to work on.
6. Have youth log on with their user name and password and find your Introductory VoiceThread.
7. Have youth post a comment but not their names.
8. After participants have responded to the thread with their own information, play them 1 at a time for everybody to hear.
9. Have youth guess who wrote each response.

Debriefing Questions:

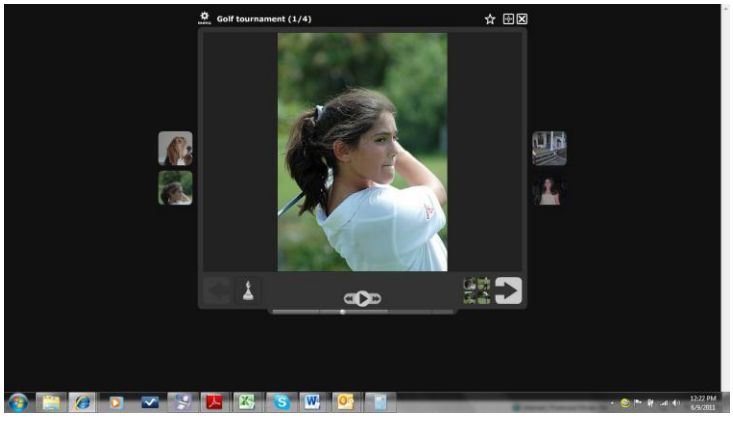
- What information was shared in VoiceThread that might compromise your safety if it were released publicly?
- Why is it important to consider who will see your online work before you post material online? (have participants consider their personal safety and the safety of all deployed Service Members)

- Why is it inappropriate to share some things online in regards to the emotional well-being of your Family?

Activity 3: **Explore VoiceThreads (30 Minutes)**

1. *"Now we're going to look at some examples of VoiceThreads that other people have created."*
2. Cue a couple simple, interesting looking threads found at voicethread.com (those you identified in advance as instructed). Click the "Browse" tab and show them on the LCD projector.
3. Demonstrate on screen as you give the instructions:
   a. *"Start by clicking on the 'Browse' tab. This will show you threads that are 'public.' What does public mean? Anybody and everybody can see them. We won't be doing any public threads during our time together."*
   b. *"Now look at the Browse tab and you'll see a 'Search' box. Enter the name of your favorite hobby ('sports' and 'space exploration' bring up interesting public threads you can look at). See if you can find threads written by other young people. Take a look at what some of them have done."*
   c. *"Tell me if you find examples of young people who have shared too much information online. Or are they all being careful? What steps have they taken to cover their identities? Can you even figure out what town or state they live in?"*
   d. *"What is one interesting thread you each watched?"*

Activity 4: **Create Your Own VoiceThread (70 Minutes)**



"What ideas do you have for creating your own VoiceThread? What kinds of things could you put in your thread? What could you tell people about? You can also ask questions for people to respond to. What do you want to find out from other people? If you brought digital pictures or video with you, you may want to use them."

1. Hand out the "How to Make a 'Thread'" handouts.
2. *"Click the 'Create' tab."*
3. *"Click 'Upload.' Uploads may come from material on your data stick, the laptop, media sources such as Flickr or Facebook, websites (urls) or recorded live from webcams."*

4. *"If you're recording via webcam, you don't need to make any further comment. If the thread includes uploaded images, you'll need to click the 'Comment' button so you can leave a comment about your upload(s). Comments can be done by microphone, webcam or by typed messages."*
5. *"It's important to remember that this is a practice VoiceThread that will be available for only a couple weeks. VoiceThread is free and once you've mastered the skills, you can set up an account at home so you can interact with your Service Member and Families."*
6. Have volunteers circulate while youth work on their VoiceThreads in case anyone has questions.
7. Leave a few minutes at the end to allow time for any youth who wish to share their VoiceThread with the group.

Talk It Over & Snack: **(30 Minutes)**

1. To help you focus the discussion, briefly look at Life Skill, Resilience Skill and Science and Technology Objectives on page 1.
2. Lead the entire group through the Talk It Over discussion.
3. Remember to include the Uniformed Service Member in the discussion.
4. Have a volunteer take comments/notes about group dynamics and specific youth comments.
5. Hand out the snack so youth can eat during the discussion.

Share/Reflect

- Did using VoiceThread help you communicate your emotions? How?
- How did that make you feel? Were you surprised?
- How did you take responsibility for being safe while you used VoiceThread?
- Do you feel VoiceThread will help with interactions with your Service Member? Family? Community? How?

Process

- Tell me some things about how you approached doing a VoiceThread. Did you have a plan? Did you just jump into it?
- What was easiest? Most difficult? Was it confusing?
- How did you work through confusion and difficulty?
- What did you learn through sharing with others?
- How did we do this VoiceThread so that you would stay safe online? (threads are kept private and only certain trusted people get to see them)

Generalize

- How could what we learned today be used to educate others about how communities can better support youth from Military Families?
- What have you learned about:
  - Communication?
  - Personal responsibility?
  - Maintaining relationships across distance and time?
  - Your responsibility in helping your Family stay safe through your online activities?
- In what circumstances would it be okay to create a public VoiceThread? When would it even be desirable?

- What new questions do you have about yourself and others?

Apply

- What are qualities that are important in a good communicator online?
- Think about when you have run up against problems in life. What did you do to get through them? What are good problem-solving strategies that you use?
- What are some problems you have had or could see coming with a Service Member being deployed? What are your resources for dealing with those problems?

Debrief Youth on Life/Resilience Skills:

Point to the Life/Resilience Skill signs that are posted around the room:
Communication, Self-responsibility, Emotional, Social, Family and Spiritual.
As you point to each sign, ask:

- How have our activities today helped you develop your _____ (skills)?
- Why do you think these skills are important?

Closing & Cleanup: **(10 Minutes)**

"Today we explored VoiceThread using a temporary (fee based K-12) version which is only available to access for a couple of weeks. VoiceThread Basic is a free program that is available on the web and as a free app on iPad 2 devices. With the help of adults at home, you may want to open your own account for use in the future. We hope that you'll find ways to include your Service Member in your life at home by sharing pictures, videos and experiences with them on VoiceThread so that they can interact with you and stay connected with you. We also hope that you are more conscious of security issues so that you and your Family remain safe while sharing information with each other.

"As you leave today, please take the parent letter handed to you and give it to your parent or guardian.

"Please make sure that your area is clean before you head out! Thanks for coming and learning and sharing with us!"

Extend the Activity:

- Use the iPad 2 devices to access the VoiceThread app to create VoiceThreads
- Open a Family VoiceThread account and create more VoiceThreads

Post Event

Lead Volunteer:

- Check to make sure that the space is clean and returned to the arrangement it was in prior to your arrival
- Inventory and put all equipment and supplies back into their respective kits and pack them up to return as directed; make sure all iPad 2 devices, connecter kits, cords and power chargers are returned to the OMK Tech Discovery Tool Kit

- Fill out report:
  - Names of all volunteers
  - Number and names of youth (attach sign-in sheet)
  - Quotes from youth about activities
  - Other important notes on activities, volunteers and youth
  - Critical follow-ups (parents about behavior/worries about a particular youth, inappropriate language from a volunteer, etc.)
  - Indicate if there are videos, photos or other content that needs to be forwarded to youth/Family; make it clear which items go to each youth/Family

Activity Developed for OMK Tech Discovery by:
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The OMK Tech Discovery Curriculum was developed at the University of Minnesota Extension Center for Youth Development through a partnership of the Department of Defense, Office of the Secretary of Defense, Military Community & Family Policy, Office of Family Policy/Children and Youth and the United States Department of Agriculture, National Institute of Food and Agriculture, Institute of Youth, Family and Community, 4-H National Headquarters under Kansas State University special project number 2010-48713-21882.

Threaded Thoughts

Dear Family,

Today we learned about Internet security and how important security is when we share data, images and information online. Taking personal responsibility for what we each put online was an important element of our activities. Knowing how much personal information to share and knowing **when not** to share certain information and feelings is an important skill. It is also important for Operational Security. Help your youth practice these skills throughout the Deployment Cycle.

We also learned about a new tool that youth can use to share information about the events and people in their lives in a secure environment. VoiceThread is a new online tool for communicating ideas and sharing across distance and time that uses pictures, movies, graphics, drawings and audio to convey concepts and information about important events, places, people and things.

VoiceThread provides a place to invite others to join in a conversation about the posted pictures, video or other material. The creator of the VoiceThread (in this case, your youth) starts by adding something to the thread that they would like to share with others. Today, some youth put in Family pictures and others did videos of various kinds. We were able to share our "threads" with each other during the event.

Today we used a secure educational version of VoiceThread that will not be accessible after the event. This was a practice session so that your youth could learn how to use VoiceThread. We encourage you to help your youth open an account with a free version of VoiceThread (voicethread.com) to use from home. This tool may provide another way for you and your youth to keep Service Members updated while they are away.

The life skills learned today and the time your youth spends with other youth who are going through similar experiences will certainly help them stay resilient as your Service Member is deployed. Thank you for your support and for helping your youth participate in this OMK Tech Discovery experience!

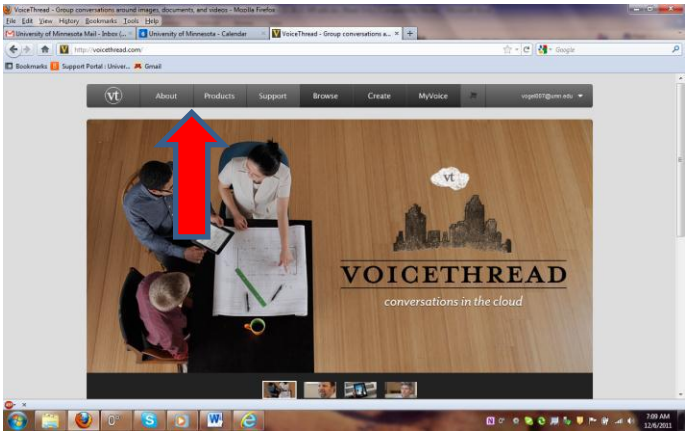
Best regards,

Conversation Starters:

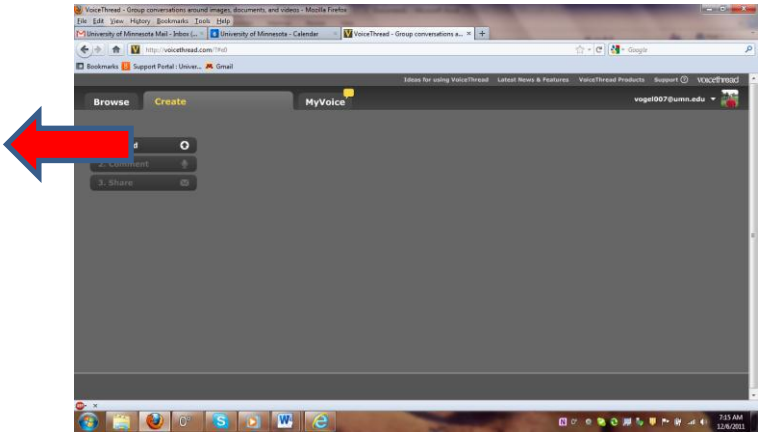
- Would you rather have a digital picture or a video of yourself? Why?
- Do you like to read the comments on the Internet about news items or other postings?
- Have you ever Googled yourself?
- What is an important piece of information you would not want to share with a friend? With Family?

How to Make a "Thread"
VoiceThread Instructions

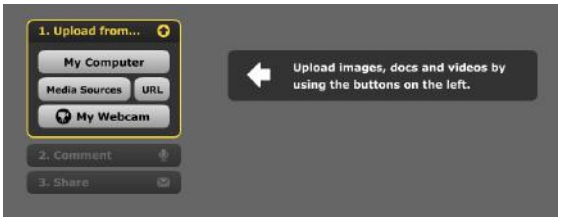
1. After your group leader invites you to your group's VoiceThread area, click on "**Create**." (Your screen may look different than this but look for "Create.")



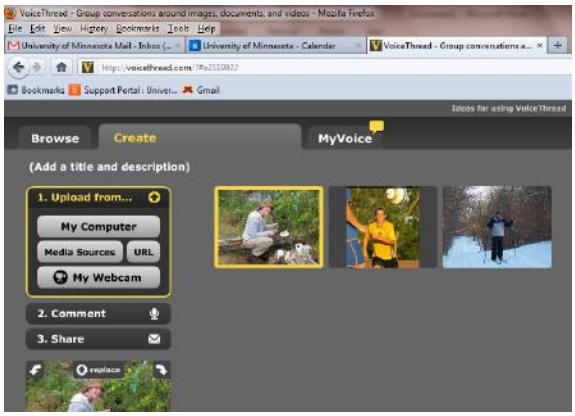
2. Click "**Upload**."



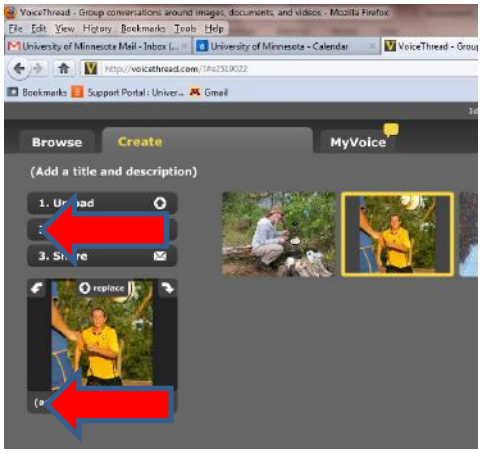
3. Do you have pictures or video you would like to load into VoiceThread? Use your data stick to upload your images to the computer or use the webcam on the laptop to take new images.



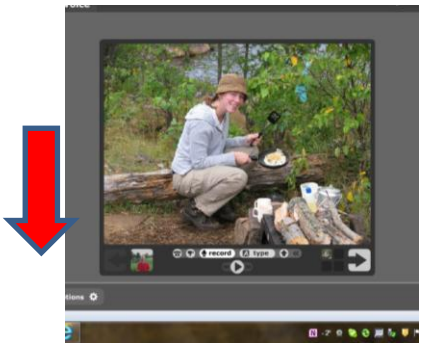
4. Put pictures together in a presentation by clicking Upload again.



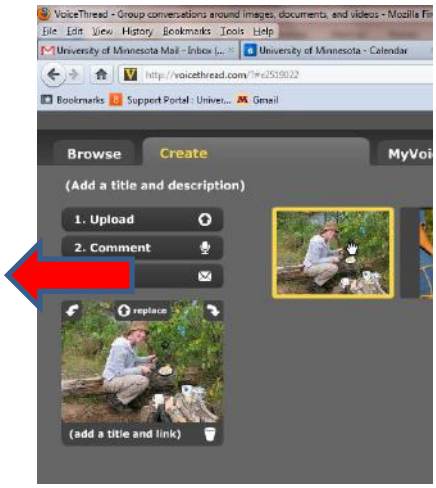
5. **Add titles** to your pictures, and then click "**Comment.**"



6. **Comment** on each of your pictures or videos by typing or recording a message using your laptop's microphone or the computer headset with microphone.



7. When your VoiceThread is done, click "**Share**." Your group leader will help you share your presentation with the rest of the group.



8. As VoiceThreads from other people are shared with you, look at their presentations and practice commenting on some of their pictures or videos.