# 2010-2011 ACE Curriculum

## Grade 1 Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACE Program Overview</td>
<td>2</td>
</tr>
<tr>
<td>Teacher Implementation Guidelines</td>
<td>3</td>
</tr>
<tr>
<td>School-Wide Implementation Guidelines</td>
<td>5</td>
</tr>
<tr>
<td>Lesson Information, Tips, &amp; Suggestions</td>
<td>7</td>
</tr>
<tr>
<td>Drug Demand Reduction (DDR) Connections</td>
<td>8</td>
</tr>
<tr>
<td>Forms</td>
<td>11</td>
</tr>
<tr>
<td>Class Progress Chart</td>
<td>11</td>
</tr>
<tr>
<td>Sample Parent Letter</td>
<td>12</td>
</tr>
<tr>
<td>Award Nomination Forms</td>
<td>13</td>
</tr>
<tr>
<td>Lesson Evaluation Form</td>
<td>19</td>
</tr>
<tr>
<td>Pre-Test/Post-Test Record Sheet</td>
<td>20</td>
</tr>
<tr>
<td>Pre-Test/Post-Test</td>
<td>21</td>
</tr>
<tr>
<td>Academic Aerospace Lessons</td>
<td>25</td>
</tr>
<tr>
<td>Lesson #1: The Wind in Your Socks</td>
<td>25</td>
</tr>
<tr>
<td>Lesson #2: Sled Kite</td>
<td>31</td>
</tr>
<tr>
<td>Lesson #3: *Plane Art</td>
<td>37</td>
</tr>
<tr>
<td>Lesson #4: *Plane Flight Pie Chart</td>
<td>43</td>
</tr>
<tr>
<td>Lesson #5: Map It</td>
<td>49</td>
</tr>
<tr>
<td>Lesson #6: Balloon Rocket</td>
<td>55</td>
</tr>
<tr>
<td>Lesson #7: Good Enough to Eat</td>
<td>65</td>
</tr>
<tr>
<td>Lesson #8: Load the Shuttle</td>
<td>71</td>
</tr>
<tr>
<td>Lesson #9: Do You See What I See?</td>
<td>81</td>
</tr>
<tr>
<td>Character Aerospace Lessons</td>
<td>93</td>
</tr>
<tr>
<td>Lesson #1: What Goes Around Comes Around</td>
<td>93</td>
</tr>
<tr>
<td>Lesson #2: Honest or Not Honest, That is the Question</td>
<td>101</td>
</tr>
<tr>
<td>Lesson #3: Respect, Here is What it Means to Me</td>
<td>111</td>
</tr>
<tr>
<td>Lesson #4: Go Green</td>
<td>117</td>
</tr>
<tr>
<td>Lesson #5: Responsibility: Pick It Up</td>
<td>125</td>
</tr>
<tr>
<td>Lesson #6: Roger, I Read You Loud and Clear</td>
<td>137</td>
</tr>
<tr>
<td>Physical Fitness Aerospace Lessons</td>
<td>141</td>
</tr>
<tr>
<td>Lesson #1: Spaceship Tag</td>
<td>141</td>
</tr>
<tr>
<td>Lesson #2: Alien Eggs Relay</td>
<td>145</td>
</tr>
<tr>
<td>Lesson #3: Catch a Shooting Star</td>
<td>149</td>
</tr>
<tr>
<td>Lesson #4: Steal the Meal</td>
<td>155</td>
</tr>
<tr>
<td>Lesson #5: Comet Tag</td>
<td>169</td>
</tr>
<tr>
<td>Lesson #6: Moon Motions</td>
<td>173</td>
</tr>
<tr>
<td>Website and Literature Resources Index</td>
<td>177</td>
</tr>
</tbody>
</table>

The balsa planes provided by CAP to the first-grade students are to be used with academic aerospace lesson #3, “Plane Art,” and lesson #4, “Plane Flight Pie Chart.”
The Wind in Your Socks
Grade 1 Academic Lesson #1

Topics: air, directions (science, social studies)


Length of Lesson: 45-60 minutes

Objectives:
- Students will define air and wind.
- Students will construct a simple windsock.
- Students will identify uses of a windsock.
- Students will identify which way the wind is moving using a windsock.

National Science Standards:
- Content Standard A: Science as Inquiry
- Content Standard B: Physical Science
- Content Standard D: Earth and Space Science
- Content Standard E: Science and Technology

Background Information: (from NASA’s Aeronautics: An Educator’s Guide)
A windsock is a type of kite used to detect wind direction. It is a tapered tube of cloth that is held open at one end by a stiff ring. Wind is directed down the tube, causing the narrow end to point in the same direction the wind is blowing. Windsocks at airports allow pilots to see the direction and estimate the speed of the wind. Pilots take off into the wind to help push more air over the wing to achieve lift, and they land into the wind to provide resistance or drag to slow the plane down. Meteorologists use wind direction to help predict the weather.

Materials:
- windsock or picture of a windsock (example attached)
- one sheet of 8.5” x 14” colored construction paper per student
- crayons or markers
- tape
- one sheet of gift bag tissue paper per student (or two rolls of crepe paper for the class)
- scissors
- glue
- single-hole punch
- kite string or yarn
- ruler
- fan (optional)
NOTE: It will be helpful to have a windsock pre-made to show the students as an example. Although not necessary, it will be helpful to either have pre-cut strips or one pre-cut strip for each child so the child can duplicate making the strips for the windsock.

Lesson Presentation:
1. Show students a windsock or a picture of a windsock. Ask students if they know what it is and for what purpose it is used. Listen to responses.
2. Explain to students that the device you are showing them is a windsock. Tell them that it is a sock that acts like it is catching the wind so that you can see which way the wind is blowing and how quickly the wind is blowing.
3. Ask students if they know what wind is. Explain that wind is moving air that we cannot see, and that air is what we breathe. Have students take a deep breath. Tell them that they just breathed in air. Ask them if they saw the air they breathed in. Tell students that although we cannot see clean air, we can feel air when it moves. Have students hold their hand in from of them and blow on their hand. They felt air moving across their hand. Ask students to name other things they might see or feel to let them know that air is moving. (trees blowing, leaves drifting to the ground, hair blowing, flag waving, etc.)
4. Tell students that when the wind blows, a windsock can easily show them which way the air is moving and how quickly. Ask students what a windsock might look like if the wind is blowing really hard. Ask students what the windsock might look like if the wind is blowing very softly.
5. Ask students why it might be good to know which way the wind is moving and how quickly it is moving. After listening to the responses, explain the following: Windsocks help pilots, the people who fly airplanes, know which way they can best take off and land because they take off and land into the wind. Also, the meteorologist likes to know which way the air is moving and how fast because it helps him/her to know what the weather is going to be like.
6. Tell students that they are going to make a windsock so they can see which way the wind is blowing and how strong the wind is. (Show a finished example.)
7. Distribute the materials, and make the windsock.

Directions to make the windsock:
1. Fold the construction paper in half lengthwise like making a hot dog bun.
2. Have the students write their names on one side of the folded paper, and decorate the other side of the folded paper. The fold in the paper will be at the top of the windsock.
3. Bend the folded paper to make a ring, overlapping the ends by .5” to 1”. Make sure the artwork is on the outside of the ring. Tape the ring together.

4. Cut out 10 strips of tissue paper measuring 1.5” by 15”, or cut five strips of crepe paper 15” long. Note: Depending on the overlap made in step 3, one more or less strip of paper may be needed.

5. Paste or staple the strips of paper to the inside of the ring.

6. Punch three holes of equal distance around the top of the paper ring.

7. Cut three pieces of string 15” each. Tie one end of each piece of string to each of the holes. Tie the other ends of the string together.

8. Allow students to try their windsock. You may have them blow on it, place it in front of a fan, and/or take it outside.

Summarization:
Ask students to name what they made. (windsock) Ask for volunteers to explain the two things that the windsock does. (shows which way the wind is blowing, shows how hard the wind is blowing) Ask them if they remember who might use a windsock and why. (pilot - take off and land into the wind; meteorologist - to tell what the weather is going to do)

Tell students to also let their windsocks remind them of the words that come out of their mouth. When people talk, we don’t see actually see the words they say, but words do create feeling. Just like when the wind blows, we feel it. When people say nice things, we feel good. When people say mean or ugly things, it can make us feel angry or sad. Just because we don’t see something doesn’t mean we cannot feel it. Encourage students to enjoy their windsocks and use nice, wonderful words that will make people feel happy, including themselves.

Assessment:
- windsock construction
- teacher observation of correct use of windsock

Additional activity ideas to enrich and extend the primary lesson (optional):
- Have students draw a picture showing what happens to their windsock when the wind is blowing lightly and then strongly.

- Complete the “Which way is the wind blowing?” worksheet. (Students may use their windsock and blow or use a fan to help them.)
  Answers: 1.  2.  3.  4.

- Complete the “Wind in Your Socks” worksheet.
Which way is the wind blowing? Color the arrow to show which way the wind is blowing.

1. [Image of windsock]
2. [Image of carp streamers]
3. [Image of windsock in a storm]
4. [Image of windsock with flags]
5. [Image of windsock with plane]
6. [Image of windsock with airplane in sky]

CAP's ACE Program (2010)
Civil Air Patrol’s ACE Program

Plane Flight Pie Chart
Grade 1 Academic Lesson #4

Topics: motion, counting, graphs (science, math)

Length of Lesson: 45 minutes

Objectives:
- Students will practice flying their plane at a target.
- Students will define the term data.
- Students will record information.
- Students will create a pie graph using their information.

National Standards:
Science
- Content Standard A: Science as Inquiry
- Content Standard B: Physical Science
  - Properties of objects and materials
  - Position and motion of objects
- Content Standard E: Science and Technology
  - Abilities of technological design

Math
- Number and Operations: Understand and represent commonly used fractions, such as 1/4, 1/3, and 1/2
- Data Analysis and Probability Standard
  - Represent data using concrete objects, pictures, and graphs
  - Describe parts of the data and the set of data as a whole to determine what the data show
- Representation: Create and use representations to organize, record, and communicate mathematical ideas
- Connections: Recognize and apply mathematics in contexts outside of mathematics

Background Information:
No background information is necessary for this lesson; however, please see the “NOTE” that follows the list of materials to learn how to make the targets.

Materials:
- balsa planes (provided by CAP)
- colored pieces of construction paper
- “Plane Flight Pie Chart” copies
- dry erase board (or chalkboard) and 4 different colored markers (or chalk)
NOTE: To assemble a target, join 4 different colored pieces of construction paper together using tape. Have enough target areas set up in the classroom prior to beginning the lesson. Consider making large targets by using butcher paper, or attach multiple pieces of construction paper to make a larger target. Also, set up “flight” lines by placing a piece of masking tape on the ground several feet in front of each target. This will let students know where to stand to toss their airplane.

Lesson Presentation:

1. Distribute CAP balsa airplanes to students. If students have not completed academic lesson #3, “Plane Art,” have students carefully assemble the balsa planes. Make sure students have their name written on their airplane.

2. Tell students that they will practice their flight skills today by tossing their airplane toward a target. Show students the target(s) in the classroom. Tell students that they will stand behind the “flight” line and toss their airplane toward the target.

3. Divide students into groups of 4 members per group and assign a target to each group. Allow each person to practice tossing his/her airplane toward the target.

4. Once all students have had the opportunity to practice a few times, ask all students to return to their desks.

5. Explain to the students that they will be recording information about their flights. Tell students that another word for information is “data.” Scientists collect data and often show their data (information) to others in the form of charts and graphs. Tell students that they will make a pie chart to show information about the data they collect from their flights today.

6. Distribute the “Plane Flight Pie Chart” data sheet to each student, and ask them to write their name on their paper. Explain that they will toss their airplane toward the target for a total of 10 times. After each toss, they must go to their data sheet and indicate what color their plane hit on the target by coloring the box on their data sheet the same color that their plane hit on the target. If their plane does not actually make contact with a color on the target, students should select the color on the target that their plane came closest to hitting. Demonstrate the instructions for the students.

Tell students that after they have tossed their plane 10 times and have 10 colored boxes on their data sheet, they should return to their seats and wait for the next set of instructions. Tell them that because they are in groups, group members can be good teammates by retrieving the planes, waiting patiently, helping others with their data sheet, etc.
7. Ask students to take their data sheet, crayons, and plane to their assigned target area and begin tossing their airplanes and recording their data in the boxes on their data sheet.

8. Once all students have finished and are seated at their desks, ask them to count the number of blue boxes they have. Then, ask them to color that many slices of pie on their data sheet, making sure that they color pie slices that are directly next to each other. For example, if a student’s plane hit the blue target only 2 times, the student could not color the top pie slice blue and the bottom pie slice blue. The two blue pie slices must be side by side. Demonstrate this on the board.

9. Repeat step #8 for the three other colors.

10. Explain to students that they, just like a scientist, collected information and now have created a visual picture of their data (information). This visual picture that they have created is called a pie chart! A pie chart is a visual picture that shows us information.

11. Draw a circle on the board. Using 4 colors, fill in the circle similar to the one on the right. Ask students how many times the plane hit each color if a plane was tossed a total of 10 times. Explain that when half of a pie chart’s circle is one color, it represents “half.” So, if a plane was tossed 10 times, the plane hit that particular color 5 times. Based on this information, see if students can determine the specific numbers for the other 3 colors which appear on the right side of the circle. Ask students to notice how two colors take up the same amount of space, meaning the number of hits for both of these colors will be the same. (In the example on the right, blue and orange represent 2 and yellow represents 1.)

**Summarization:**
Ask students to share what they learned today. Ask them to define data and pie chart.

**Character Connection:** In order to stay on target in life, we must know where it is we want or need to go and do our very best to get there. For example, if we want to make it to second-grade, we must aim to get there by following directions, doing our homework, asking questions when we do not understand something, and doing our best while in first-grade. Always think about where it is you are trying to go and make good choices to help you get there! Making good choices will help keep you flying in the right direction!
Assessment:
- teacher observation
- completed “Plane Flight Pie Chart” data sheets

Additional activity ideas to enrich and extend the primary lesson (optional):
- Have students make a bar graph using their flight data.

- On the board, list each of the 4 colors that were used to make the targets in the classroom. Poll the students to see which color they hit the most. For example, ask how many students hit yellow the most, and record the number of students whose plane hit the blue target the most next to “blue” on the board. Once the information has been collected, have students construct a bar graph to reflect the information. Another idea is to prepare a circle graph that shows the same amount of pie slices on the graph as the number of students in the class and complete this lesson extension activity. Hang the class bar graph or pie chart in the room as a reminder of this activity!

- Allow students to look at 3 other students’ pie charts. Have them write each student’s name on a piece of paper and write down the number of times the student’s airplane hit each color of the target by looking at the pie chart.

Name _________________________

**Plane Flight Pie Chart**

1. Toss your plane toward a target.
2. Color the first box below the same color as the color that your airplane hit. If your airplane did not hit a color, use the color that it came closest to hitting.
3. Toss your plane 9 more times so that each of the 10 boxes below will have a color.

   ![Pie Chart](image)

   - [ ]
   - [ ]
   - [ ]
   - [ ]
   - [ ]
   - [ ]
   - [ ]
   - [ ]
   - [ ]
   - [ ]

   Wait for your teacher’s instructions before starting step #4.

4. Pick one colored square above. Count how many squares there are of that color. Color the same number of pie slices that color. Make sure the pie slices you color are next to each other! Don’t skip pie slices when coloring!
5. Follow the directions in step #4 for the other colored boxes.
Civil Air Patrol's ACE Program

What Goes Around Comes Around
Grade 1 Character Lesson #1

Topics: choices, consequences, motion (language arts, science)

Length of Lesson: 30 minutes

Objectives:
- Students will connect a character development story to daily actions.
- Students will construct and learn to throw a boomerang.
- Students will use critical thinking skills to connect the aerodynamic aspects of the boomerang to the positive and negative consequences of their daily actions.

National Standards:
Character Education Partnership (CEP)
- Principles 1, 2, 3, 4, 6, 7, 9

Science
- Content Standard A: Science as Inquiry
  - Abilities necessary to do scientific inquiry
- Content Standard B: Physical Science
  - Properties of objects and materials
  - Position and motion of objects
- Content Standard E: Science and Technology
  - Abilities of technological design

Background Information:
A consequence is something that is caused after some action is completed. When something good is done, a good consequence is the outcome. Conversely, when something bad is done, a bad consequence usually follows. In this lesson, students will be able to identify positive outcomes for showing kindness and compassion. Additionally, they will be reminded that the choices they make will come back to them, like the flight of a boomerang.

Materials:
- pre-constructed boomerang (directions in lesson)
- Aesop's fable of "The Lion and the Mouse" (included)
- manila file folders (one per pair of students)
- pencil
- scissors
- boomerang pattern for each student or pair of students (included)
Lesson Presentation:

1. Show students a four-winged boomerang. Ask students to tell you what it is and what it does.

2. Demonstrate the boomerang. Tell students that a boomerang makes you think about kindness and that you’ll explain why a little later.

3. Ask students if they think that a tiny mouse could help a huge lion. Ask if they think the lion would scare the mouse. Tell the class to listen carefully to the story and see if the mouse helps the lion.

4. Read the fable of “The Lion and the Mouse.”

5. Ask questions at the end of the story.
   - What was the lion doing at the beginning of the story? (sleeping)
   - What caused the lion to want to eat the mouse? (The mouse woke him up.)
   - Why did the lion not eat the mouse? (The mouse told the lion he might be able to help him someday, and the lion was good-natured.)
   - Did the lion believe there was any way the mouse could ever help him? (no)
   - Why do you think the lion didn’t think that a mouse could ever help a big lion? (The lion probably thought of the mouse as being too small and weak to help a big, strong lion.)
   - How did the mouse show kindness to the lion? In other words, how did he help the lion? (gnawed ropes that had trapped the lion)
   - What would have happened if the lion had not been nice to the mouse by letting him go when they first met? (The lion would have been trapped forever or maybe would not have lived.)
   - How did each of these characters show kindness toward others? (The lion didn’t eat the mouse, and the mouse rescued the lion from the ropes.)

6. Show the boomerang again. Ask students if they think they might know why boomerangs remind you of kindness. Explain that when we show kindness to others, hopefully others will show kindness to us in return. Just like a boomerang is thrown out and should return, when kindness is provided, it should be returned.

7. Ask if boomerangs return every time. Explain that sometimes boomerangs may not return like they are supposed to if not thrown correctly. Tell students that if they do not do the right things in life, good things will not return to us as we want. If they do rude and uncaring things, such as talk badly about others and pick on people, eventually their ugly behavior will get returned to them by someone, or they will get in trouble for their bad behavior at some point in time. Just like a boomerang, what you say and do will come back to you in some way. It is best, therefore, to choose to do good things.
8. Tell students that they will now construct a boomerang to remind them that the things we say and do come back to us in one way or another. Follow the directions to construct the boomerang.
   - Distribute boomerang patterns to students.
   - Have students cut out the pattern.
   - Have students trace the pattern onto the front or back of a file folder. (Other materials may be substituted for the file folder such as foam trays or cardboard. When thicker materials are used, the top surface of each blade should be rounded.)
   - Cut out the boomerang.

9. Fly the boomerang (or present the summarization first depending on time). The directions for flying the boomerang are as follows: Hold one wing of the boomerang between your thumb and index finger. Hold the boomerang vertically (up and down), and give a spinning motion to the boomerang as you throw it straightforward. The boomerang will travel straight out from you a few feet, circle, and come back. By the time it returns, it will be spinning in a level plane. Catch the boomerang by clapping it between your hands or thrusting your finger into the hole as it momentarily hovers. Try throwing the boomerang horizontally and observe its flight. (from NASA Glenn Research Center lesson)

**Summarization:**
Explain to students that the boomerang is a good symbol to remind them how they should live their lives. They should try to go in the right direction in life, doing what they are supposed to do. They should also try to do good things for others along the way, because what they do will somehow return to them, just like the boomerang comes right back to them if they throw it correctly. It is important to listen to and follow the directions of the adults around them, learn all they can in school, be kind to others and be honest in all they say and do. If they choose to do the right things in life, good things should come back to them. If they choose to do wrong things in life, good things will not come back to them. “Like the flight of the boomerang, the choices you make today will return to you later in life, so make good choices!”

**Assessment:**
- student answers during class discussion
- construction of boomerang

**Additional activity ideas to enrich and extend the primary lesson (optional):**
- Draw a Venn diagram or chart on the board. Compare and contrast the characters of the lion and the mouse. Be sure to include that one way they were alike was that they showed kindness and cared about someone other than themselves.
Have students think about the characteristics of the mouse. Because the mouse was small, he could move through small places. He had good teeth. He used his special features to help the lion. Draw a picture of the 4-winged boomerang on the board. Say, "If I was the mouse, and I wanted to write a way I could help others on this blade of the boomerang, I would write, 'I am small, so I could get to something in a small space for someone.' " Ask students to help you write three other ways the mouse could help others. Write one way on each of the remaining three blades. Now, ask students to think of their own special qualities. Have them write four ways they can help others, with one answer on each blade. Allow students the opportunity to share what they wrote. Remind students that when we help other people, we show that we are kind and caring.

Play the song "Boomerang" from Charlotte Ritchie’s *Closer CD*. (Words to the song are included on page 76.) For the *Closer CD* or the accompaniment CD only (entitled “Closer Soundtrack - Complete Album,” go to http://www.rsimusicgroup.com/store.html.

Conduct the following caring compliments lesson:
- Read and discuss Bill Cosby’s *The Meanest Thing to Say*.
- Pair each student up with a partner. Instruct students to individually give each other a compliment. Help the activity along when needed. Ask the person who is receiving the compliments to look into the mirror. Ask the student to describe his or her own facial expression. After a student has given a compliment, have the student repeat the compliment while looking at himself/herself in a mirror. Ask the student who gave the compliment to describe his/her facial expression.
- Lead a discussion concerning how the students felt when they received a compliment. List the responses on the board or on a large blank piece of chart paper.
- Discuss how students felt when they were giving a compliment. List the responses on the board or on a large blank piece of chart paper.
- Distribute paper plates (card stock) and drawing materials such as crayons, paint, or markers. Ask students to draw the way their face looked when they received a compliment. Allow them to look into the mirror if they wish. Ask students to flip the plate over and draw the way their face looked when they gave a compliment. Allow them to look into the mirror if they wish.
- End with a discussion on the likenesses and differences (if any) of the two sides of the plate. Most plates will probably look alike on both sides since giving and receiving compliments make people feel happy. Use the paper plates for a display titled “The Many Faces of Compliments.”

Associated Literature:
- *The Meanest Thing to Say* by Bill Cosby
- *Andre, Angel in a Poodle Suit* by P. Danner
- *Oliver Button is a Sissy*, by T. de Paola
- *Two Good Friends* by J. Delton
- *Corduroy* by D. Freeman
- *Alexander and the Wind-Up Mouse* by L. Lionni
- *What Good Thing Can Patches Do?* by S. K. Mitchell
“The Lion and the Mouse”

Aesop

One day a great lion lay asleep in the sunshine. A little mouse ran across his paw and awakened him. The great lion was just about to eat him up when the little mouse cried, “Oh, please, let me go, sir. Some day I may help you”. The lion laughed at the thought that the little mouse could be of any use to him. But he was a good-natured lion, and he set the mouse free.

Not long after, the lion was caught in a net. He tugged and pulled with all his might, but the ropes were too strong. Then he roared loudly, hoping someone would come to his aid. The little mouse heard him and ran to the spot. “Be still, dear Lion, and I will set you free. I will gnaw the ropes.” With his sharp teeth, the mouse cut the ropes, and the lion came out of the net. “You laughed at me once,” said the mouse. “You thought I was too little to do you a good turn. But see, you owe your life to a poor little mouse.”
Boomerang

Words and Music by Sonya Isaacs and Ben Isaacs
Performed by Charlotte Ritchie
From Charlotte Ritchie’s CD, CLOSER

VERSE 1:
Talk is cheap no matter what you say
You’re gonna reap tomorrow what you sow today
So don’t take too lightly your deeds to mend
‘Cause the winds of justice will blow again

CHORUS:
Hey, watch what you do and watch what you say
That boomerang is coming back your way
The harder you throw it, the farther it flies
It might hit you harder than you realize
Gotta play by the Golden Rule in this game
Or you won’t be ready for that boomerang
Watch where you’re throwing that boomerang

VERSE 2:
Don’t point your finger at what others do
‘Cause there’s three just like it pointing back at you
You know a little bit of love goes a long, long way
You might need a little back on a hard luck day

BRIDGE:
There’s a lesson to be learned from a little toy
So listen up every man, woman, girl, and boy
Four-Wing Paper Boomerang

SOURCE: NASA Glenn Research Center

http://www.grc.nasa.gov/WWW/K-12/TRC/Aeronautics/Four_Wing_Boomerang.html
Spaceship Tag
Grade 1 Physical Fitness Lesson #1

Topics: personal space, locomotor skills

Lesson Reference: PE Central
http://www.pecentral.org/lessonideas/ViewLesson.asp?ID=3916

Length of Lesson: 30 minutes

Objectives:
- Students will understand personal and general space.
- Students will practice locomotor movements.
- Students will work cooperatively.

National Physical Education Standards:
- Standards 1, 2, 3, 4, 5, 6

Background Information:
This activity will get students physically active as they practice locomotor movements such as galloping, hopping, jumping, skipping, walking, and running. Additionally, this lesson emphasizes awareness of personal and general space. After playing this game of tag, the concept of the game can be used when trying to get the students to spread out and not touch each other. Remind students of "Spaceship Tag" while playing other games, and, as a result, they remember to stay in their own personal space.

Materials:
- hula hoops
- space music, optional

Lesson Presentation:
1. Begin with 3-5 minutes of warm up activities such as stretches, jumping jacks, running in place, or other preferred warm-up activities.

2. Instruct the students on personal and general space. Demonstrate movement with arms and legs out and then have the students display that activity, making sure they are not touching anyone or anything in "space."

3. Tell them they are each going to get a "spaceship," which will be their own personal space. While in their "spaceship," they will not be allowed in any other spaceship's personal space.
4. Have students in groups of 2-3 walk to one of the hoops, which are scattered throughout the gym, stand in it and hold onto the hoop with the hands, keeping the hoop parallel to the floor. Have the students move in their self-space, emphasizing that their hoop/"spaceship" should not be touching any other hoop/"spaceship." Tell them they are going to walk around the gym (or outside) in their "spaceship," making sure not to bump into anyone or anything. Discuss that if their "spaceship" bumps into another "spaceship," they must sit down inside the "spaceship" with their hands on their knees. They cannot get up and walk until the teacher taps them on the head.

5. At first have the students move slowly around the gym. With successful practice allow the students to gradually increase their walking speed. In addition, encourage them to move in different pathways, at different levels and perform various locomotor movements.

6. "Spaceship Tag": When the students are successful at not bumping into each other, turn it into a walking tag game. 2-3 students will be "it," remaining in their "spaceships." When they tag, they say "spaceship down." The tagged student sits in the "spaceship" and any of the other students in the class, other than the "taggers," can free her/him by gently tapping on the head and saying "spaceship up." Change the taggers frequently. As the students are playing the game, assign different locomotor skills.

**Summarization:**
Ask students why we should always be aware of the space around us. Explain that we don't want to walk or run into other people or things. Ask students what they should do if they do accidentally run into someone. (Say, "Excuse me," or "I'm sorry.") Remind students to keep themselves in their own spaceships and not invade other's spaceship space.

**Assessment:**
- Watch to see how they perform locomotor movements.
- Watch to see if they are able to keep their hoop from touching other students' hoops/"spaceships."

**Adaptations for Students with Disabilities:**
- The hoop can be taped onto a wheelchair in a non-restrictive way. You may also make a handle with a jump rope to make the hoop easier to hold. If a student is in a wheelchair or uses a walker, they can put a hand on their knee or shoulder to signify that they are down on the ground.
Additional activity ideas to enrich and extend the primary lesson:

- Have students draw a picture of a city with flying spaceships. The picture should show that the spaceships are flying safely within city.

- Distribute the "Ask Me" form. Explain the directions to the students and remind them to return it to you.

- When a "spaceship" is tagged, have the "spaceship" join IT. Then, there will eventually be one long IT spaceship. Because there are 2-3 students inside the hula-hoop, some students will have to be responsible for holding their hula-hoop as well as the other group’s hula-hoop. (The hoop of students on either end of the IT spaceship can tag.)