



National Headquarters, Civil Air Patrol

Aerospace Connections in Education (ACE) Program

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**2010-2011 ACE Curriculum
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* The Fun Shuttles provided by CAP to fourth-grade students are to be used with academic aerospace lesson #4, "Fun Shuttle."



PREVIEW

Civil Air Patrol's ACE Program

Airplane Anatomy Grade 4 Academic Lesson #2



Topics: Wright brothers, airplane parts, vocabulary (science, language arts, history)

Lesson Reference: Smithsonian National Air and Space Museum

http://www.nasm.si.edu/wrightbrothers/classroomActivities/K-3_teacher_instructions.html

Length of Lesson: 30 minutes

Objectives:

- Students will construct airplanes.
- Students will identify and define fuselage, wing, propeller, rudder, elevator, and aileron.
- Students will compare and contrast the Wright airplane with a modern day airplane.

National Science Standards:

- Content Standard B: Physical Science
 - Properties of objects and materials
 - Position and motion of objects
- Content Standard D: Earth and Space Science
 - Objects in the sky
- Content Standard E: Science and Technology
 - Abilities of technological design
 - Understandings about science and technology
- Content Standard G: History and Nature of Science
 - Science as a human endeavor

Background Information:

After thorough flight tests, the Wright brothers built their own engine and achieved the first controlled, sustained and powered flight. This occurred on December 17, 1903. The craft rose 12 feet in altitude and went 120 feet in length. The flight lasted about 12 seconds. While flight has improved significantly since that time, many of the same designs used for the Wright brothers' plane are still used on aircraft today.

To learn more about the Wright brothers, go to

<http://teacher.scholastic.com/activities/flight/wright/index.htm>

PREVIEW



Materials:

- computer(s) with Internet access
- external computer speaker (if conducting whole group lesson)
- headphones for students using individual computers (optional)
- LCD projector (if conducting whole group lesson)
- picture of the Wright Brothers' plane (AEMs have or can obtain a Wright Brothers' poster and thematic unit from the Civil Air Patrol.)
- copies of "Airplane Anatomy" worksheet

NOTE: This lesson can be done as a whole group, as presented in this lesson, or independently. If students can work on individual computers, provide them with instructions on how to get started. Then, provide them with the worksheet and allow them to complete the assignment at their own pace.

Lesson Presentation:

1. Ask students if they know when the first airplane flew, who built it, and what it looked like. Show a picture of the Wright Brothers' airplane. (or view a picture of the plane at <http://gardenofpraise.com/ibdwrigh.htm>) Provide them with information from the background information.
2. Distribute the "Airplane Anatomy" worksheet to each student. Tell students that today, they will learn about the similar parts used in the Wright brothers' airplane and a modern plane. Tell students that you will use a website on the Internet to help them answer the questions on their worksheet.
3. Go to www.nasm.si.edu/wrightbrothers/classroomActivities/k-3_flash.html. Listen as the narrator provides the beginning information.
4. Continue through the online presentation. When assembling the planes online, allow student volunteers to click and drag the airplane parts into place. As you click to learn more about the parts of the plane, have students answer questions on their worksheet.

Summarization:

Ask students to name something that they learned today. Tell students that now that they know some things about the first plane to fly and airplanes that fly today, they can compare and contrast them. Discuss some ways that they are alike and different.

Character Connection: Remind students that just like planes may look different but have some of the same parts, people look different, but have the same parts. Everyone has a heart and spirit. Encourage students to treat people with kindness and respect in order to keep people's spirits and attitudes flying high.

PREVIEW

Assessment:

- teacher observation
- student answers to class discussion questions
- "Airplane Anatomy" worksheet
- "Airplane Parts Identification" (optional - enrichment worksheet)

"Airplane Anatomy" Answer Key

1. body
2. pilot
3. fuselage
4. wing
5. wings
6. propellers
7. forward
8. rudder
9. elevators
10. monoplane



"Airplane Parts Identification" Answer Key

Part A

1. wing
2. propeller
3. fuselage
4. aileron
5. rudder
6. elevator

Part B

1. ailerons
2. fuselage
3. rudder
4. wing
5. propeller
6. elevator

Additional activity ideas to enrich and extend the primary lesson (optional):

- Allow students to color the printable DC-3 picture and Wright brothers' plane (included at the end of this lesson). These pictures were obtained and printed in this lesson with permission from the Smithsonian National Air and Space Museum. You can see the pictures online at the following sites.
http://www.nasm.si.edu/wrightbrothers/pdf/classact/color_wf.pdf (Wright brothers' plane)
http://www.nasm.si.edu/wrightbrothers/pdf/classact/color_dc3.pdf (DC-3)
- Complete the "Airplane Parts Identification" worksheet. (See answer key above.)
- Place students in small groups. Have them look at the coloring sheets (see enrichment activity). Have them complete the Venn diagram to compare and contrast the planes. Tell them not to include color as part of the comparison/contrast. Then, collect the Venn diagrams for a grade and/or discuss the results with the class.
- Allow students to learn more about planes and assemble a plane at <http://teacher.scholastic.com/activities/flight/wright/build.htm>.



PREVIEW AIRPLANE ANATOMY

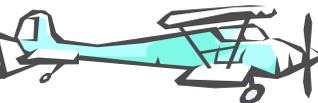
NAME _____

Directions:

While completing the activity at http://www.nasm.si.edu/wrightbrothers/classroomActivities/k-3_flash.html, write the word that correctly answers the questions or completes the sentences below. Your teacher may have provided a word bank at the bottom of this page to help you.

1. The fuselage is the _____ of the plane.
2. The fuselage holds the crew, _____, and luggage.
3. The wing, tail, and propellers are attached to the _____.
4. Which part of the plane lets it rise into the air, thanks in part to its special shape? _____
5. The _____ have moveable pieces called ailerons, which help to turn the airplane.
6. Engines turn the _____.
7. Air behind the propellers helps push the plane _____.
8. What is the movable piece on the tail that helps the plane move left or right? _____
9. What is mounted at the tail that pilots use to help the plane climb high into the sky or come down? _____
10. If a plane has only one wing, it is called a _____. (Think about the prefix!)

WORD BANK:



wing monoplane propellers rudder elevators
fuselage wings pilot forward body

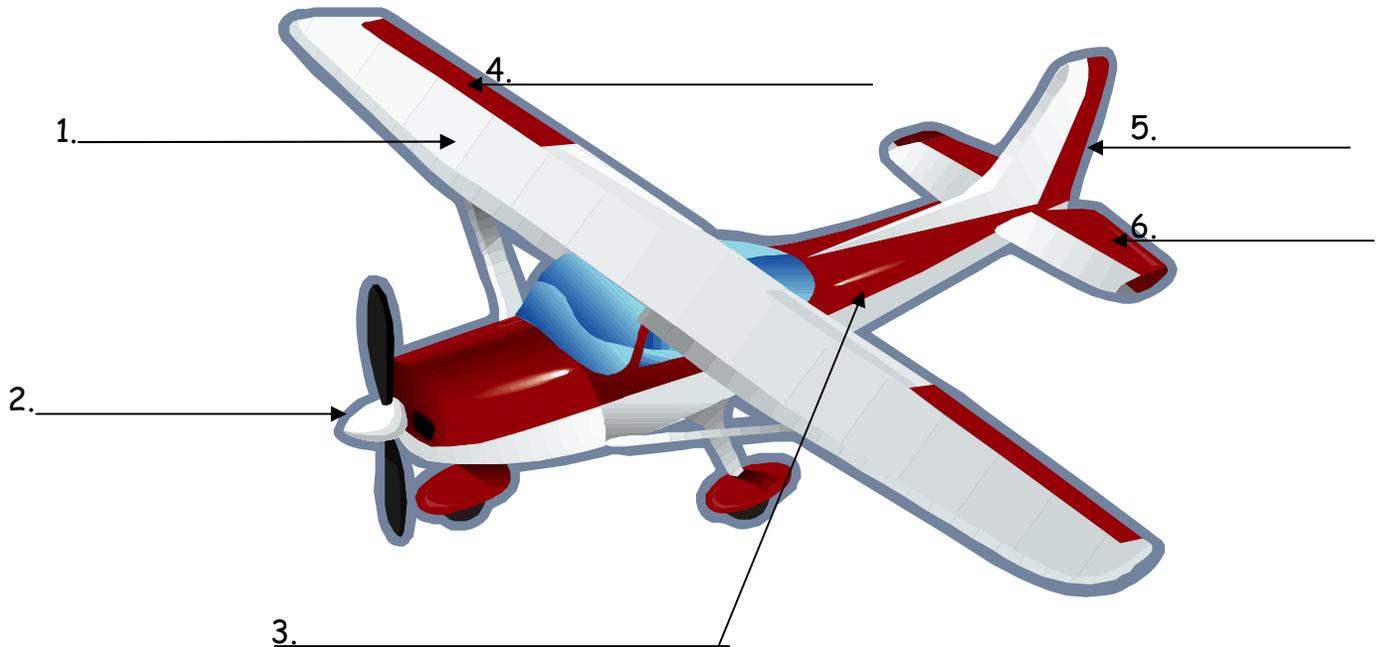


PREVIEW Airplane Parts Identification

PART A

NAME _____

Directions: Label the parts of the airplane. Your teacher may have included a word bank at the bottom of this page to help you.



PART B

Directions: For each description, write the correct airplane part. The first one is done for you.

- _____ ailerons 1. These are moveable pieces on the wing, and the pilot uses them to help turn the plane.
- _____ 2. This is the body of the airplane.
- _____ 3. This is the moveable piece on the tail that helps turn the plane left or right.
- _____ 4. The special shape of this part helps the plane lift into the air as air flows over it.
- _____ 5. This is attached to the engine, which causes it to spin.
- _____ 6. These are mounted at the tail to help the plane climb high up into the sky or to come down.

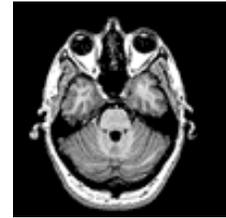
Word Bank: aileron elevator fuselage propeller rudder wing

PREVIEW

Civil Air Patrol's ACE Program



NASA Spinoffs Grade 4 Aerospace Lesson #8



Topic: technology (science, social studies, language arts)

Lesson Reference: NASA Explores

Length of Lesson: 30 minutes

Objectives:

- Students will make predictions.
- Students will define NASA spinoffs.
- Students will identify NASA spinoffs.
- Students will evaluate the importance of NASA spinoffs.



National Science Standards:

- Content Standard A: Science as Inquiry
 - Abilities necessary to do scientific inquiry
- Content Standard E: Science and Technology
 - Abilities of technological design
 - Understandings about science and technology
- Content Standard G: History and Nature of Science
 - Science as a human endeavor



Background Information: (from NASA Explores)

Dental braces, rechargeable batteries, cordless power tools, and cardiac monitoring equipment—every day, we use products and services that originated from space technologies. We have better means of detecting and treating cancer and cardiovascular disease because of our space programs. Space programs also taught us about the large ozone hole in our atmosphere, the hazards of solar radiation, the path of killer hurricanes, and how to more effectively manage crops and our national forests. If not for America's continued investment in space exploration, we wouldn't have wireless telephones, satellite television, or global positioning systems. Our technology has even been used to help law enforcement put criminals behind bars and to protect firefighters. The technologies that led to the computer bar codes in retail stores, the quartz watch you are wearing, and household smoke detectors that help you sleep soundly at night were originally developed for NASA.

PREVIEW

The benefits of aerospace technology to mankind are becoming more and more commonplace thanks to scientists involved in the space program, and to private companies that transfer aeronautics and space technology into products and services for everyday living. When aerospace technology is adapted for commercial use, it is called technology transfer (spinoffs). NASA investments in space have yielded more than 1,200 spin-offs used to enrich lives on Earth every day. Each year three-technology transfers are inducted into the U.S. Space Foundation's Technology Hall of Fame.

Through exploring space, we improve our lives, boost our economy, inspire future generations, and lift our national spirit—all this for less than one percent of the Federal budget!

In this lesson, students will predict which items are NASA spinoffs, and then they will learn the correct answers to their predictions.

Materials:

- dry erase board with marker (or chalkboard and chalk)
- "More NASA Spinoffs" copy for each student (copy included)
- "Why Space? - Crossword Puzzle" (optional)

NOTE: You may choose to allow students to discover not only the meaning of NASA spinoff, but also information about spinoffs by substituting the enrichment activities for the lesson presentation below. (Also, please note that Tang and Velcro are NOT NASA spinoffs.)

Lesson Presentation:

1. Ask students if they have ever thought about the importance of space exploration. Should we try to visit other moons and planets? Is it worth spending millions and billions of dollars to send people, spacecrafts, satellites, and space stations into space? After all, we have many things here on Earth that need our attention and money. Allow students to share their thoughts.
2. Write the term "NASA spinoff" on the board. Ask students if anyone knows what the term "NASA spinoff" means.
3. Explain that a NASA spinoff is a device or piece of technology that was originally created for or by NASA, but is now used by many people around the world in some way or another. According to NASA (<http://www.sti.nasa.gov/tto/spinfaq.htm#spinfaq6>), "a spinoff is a commercialized product that incorporates NASA technology or NASA 'know how' and benefits the public, while a NASA success is a NASA technology that is not available on the market but still yields benefits to the public. For example, a NASA technology that was used to restore valuable artwork that was damaged in a fire is considered a 'success' because it is not available for sale on the commercial market."

PREVIEW

4. Provide students with the example of temper foam that they may have seen advertised on TV. Originally, the development of this memory foam was under NASA contract with the goal of improving airplane cushions and providing better crash protection for those onboard a plane. Today, it is used in many mattresses and pillows! Tell students that they will see how many spinoffs they can identify.
5. Distribute the "More NASA Spinoffs" sheet to each student. Have them circle all of the items that they think are NASA spinoffs.
6. Once students have finished indicating their predictions by circling the items they think are NASA spinoffs, go over the information for each item. Have students keep a tally of the number they missed at the top of their page.
7. Discuss the results. Which student made the most correct predictions? Ask students to explain which spinoffs surprised them. Ask students to explain which spinoffs they think are best.

Summarization:

Ask a student to explain what a NASA spinoff is. Ask students how today's lesson affected their opinion of whether or not space exploration is important. Tell students that the spinoffs they learned about today are just a few of the many NASA spinoffs.

Character Connection: Remind students that we enjoy many conveniences and better health today because people were curious and wanted to improve living and working conditions for others. Encourage students to always look for ways to help others.

Assessment:

- teacher observation
- completed "More NASA Spinoffs" sheet
- "Why Space? - Crossword Puzzle" and/or "NASA Spinoffs" enrichment worksheets (optional)

Additional activity ideas to enrich and extend the primary lesson (optional):

- Allow students to play the spin-off game found at: <http://spaceplace.nasa.gov/en/kids/spinoffs.shtml> (You must have a browser that supports Java to play the Spinoffs Memory Game.)
- Have students complete the "Why Space? - Crossword Puzzle" that can be used with the <http://spaceplace.nasa.gov/en/kids/spinoffs.shtml> site.
- Have students complete the "NASA Spinoffs" worksheet.
- With a specific list of NASA spinoffs from which to choose, students can vote on which one they feel is the best. With the data, help students create a bar graph or pie chart that illustrates which NASA spinoff students think is the best (or most important).
- Have students play a NASA spinoff game at http://www.nasa.gov/audience/for_kids/kidsclub/flash/games/levelfour/KC_Spinoffs_Hidden_Pictures.html

PREVIEW

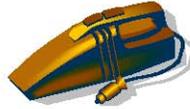
More NASA Spinoffs

Name _____

Look at each picture. Circle the pictures that show a NASA spinoff.



Bicycle Helmets



Cordless Vacuums



Smoke Detectors



Joysticks



Foam Gliders



Pool Cleaners



Wheelchairs



Swimsuits



Golf Balls



Sun Glasses



Baby Formula



School Buses

Source: NASA Explores

CAP's ACE Program (2010)

PREVIEW

"More NASA Spin Offs" ANSWERS:

Bicycle Helmets

Yes! Who would have thought? Technology used to cut drag on the wings of planes can be used to make riders safer. Old bike helmets were ugly. They made your head hot. The new helmets don't weigh as much. They have air vents in the front and back. This pulls cool air into the helmet and moves it around the biker's head.

Cordless Vacuums

Yes! Astronauts needed tools that were small. The tools needed to be light and they needed to run on batteries. "NASA did not invent cordless power tools, however. The first cordless power tool was unveiled by Black & Decker in 1961. In the mid-1960's, Martin Marietta Corporation contracted with Black & Decker to design tools for NASA. As a result of their work, Black & Decker created several spin-offs, including a cordless miniature vacuum cleaner called the Dustbuster."

(<http://www.sti.nasa.gov/tto/spinfaq.htm#spinfaq10>)

Smoke Detectors

Yes, but NASA did not invent the smoke detector. "NASA did not invent the smoke detector. NASA's connection to the modern smoke detector is that it made one with adjustable sensitivity as part of the Skylab project. Honeywell made the device commercially available. The consumer could use it to avoid 'nuisance' alarms while cooking."

(<http://www.sti.nasa.gov/tto/spinfaq.htm#spinfaq11>)

Joysticks

Yes! Joysticks help people play their best game. Astronauts used them to practice things like runway landings.

Foam Gliders

Yes! Toy designers at Hasbro wanted to make a foam glider that a child could fly. At first, their gliders didn't fly so well. They asked NASA for help. The engineers gave them a few science lessons. This helped them make a better glider.

Pool Cleaners

Yes! This space technology was made to clean water on long flights. It can be used in swimming pools to clean the water.

Wheelchairs

Yes! Robot technology was used to help make chairs move. The wheelchair can respond to 35 words.

PREVIEW

Swimsuits

Yes! Swimmers can wear a suit that makes them faster swimmers! Very small grooves were put on the outside of planes to make them go through the air faster. The grooves were put in swimsuits, too. They help the swimmer move through the water faster.

Golf Balls

Yes! Space Shuttle technology was used to make golf balls go farther.

Sunglasses

Yes! The sunglasses protect your eyes. They let good light in and keep bad light out! They don't scratch or break like other lenses. This helps them last longer, too.

Baby Formula

Yes! NASA made an oil to help astronauts on long space flights. This oil can be added to baby formula, too. It helps their brains and eyes grow better.

School Buses

Yes! The ride to school and back home is smoother and safer because of NASA technology. A stronger and safer bus frame was made. NASA testing was used to see how the frame would hold up, too.

NOTE: (from NASA at <http://www.sti.nasa.gov/tto/spinfaq.htm>)

Are Tang, Teflon, and Velcro NASA spinoffs?

Tang, Teflon, and Velcro, are **not** spinoffs of the Space Program. General Foods developed Tang in 1957, and it has been on supermarket shelves since 1959. In 1962, when astronaut John Glenn performed eating experiments in orbit, Tang was selected for the menu, launching the powdered drink's heightened public awareness. NASA also raised the celebrity status of Teflon, a material invented for DuPont in 1938, when the Agency applied it to heat shields, space suits, and cargo hold liners. Velcro was used during the Apollo missions to anchor equipment for astronauts' convenience in zero gravity situations. Although it is a Swiss invention from the 1940s, it has since been associated with the Space Program.

PREVIEW

Civil Air Patrol's ACE Program

Anger Out! Grade 4 Character Lesson #2



Topic: anger management (social studies, science, language arts)

Length of Lesson: 45 minutes

Objectives:

- Students will learn how to recognize and manage their anger.
- Students will learn several ways to control their anger.

National Standards:

Character Education Partnership (CEP)

- Principle 2: Defines "Character" Comprehensively to Include Thinking, Feeling, and Behavior.
- Principle 7: Strives To Foster Student's Self Motivation.

Social Studies:

- NSS-C.K-4.5 Roles of a Citizen

Background Information:

Nothing is more disruptive to an effective learning environment than a frustrated, angry, or aggressive student. A single student whose emotions are out of control can disrupt the learning of an entire classroom. Creating and maintaining safe and orderly classrooms is an important aspect of effective instruction, but often teachers find themselves instructing young people who lack skills necessary to cope with anger. Anger can be a tricky feeling, and one that affects children's lives in a variety of negative ways. Not being able to control their anger can create significant problems for them in school. Even milder bouts of anger, if not recognized or dealt with, can have serious implications.

Short-term physical responses to anger may include not feeling well, developing sudden aches and pains, or even unexplained feelings of dissatisfaction about everyone and everything in and around us. Long-term responses may include major illnesses, unruly behavior, and poor performances in the outside world or at home.

The key is determining how to control anger before it controls them. An important first step is recognizing the internal signs that mean you're becoming angry or are already there. Self-observation and remembering your personal reactions, both visible and those you keep to yourself; can help you understand how you are reacting when angry. It can also help to talk to trusted friends and family members, in a calm moment, about how they perceive you when you are angry.

PREVIEW

Once children can recognize the signs that indicate they are becoming angry, they can learn how to handle their emotions. Below are some suggestions on how to deal with anger.

Think it out:

- If something gets on your nerves, just sit down and relax! Then try to think in your head how to solve it.
- Just go into your room and lie down and think about it.

Talk it out:

- Talk with parents, a friend, or a counselor.
- Get help from a doctor or close family member.
- Telling someone about it to get it off your chest is a good way to deal with anger.
- If you're really mad at somebody, just tell them how you feel, but in a non-violent way.

Write it out:

- Keep a journal about your feelings.
- If you have a diary, it really helps to actually talk to it.
- It sounds stupid, but you know it won't ever say anything mean to you!

Let off steam:

- Just letting it out in a quiet place is great. You may want to go into the basement and just scream and let it all out.
- Scream into your pillow!
- Punch your pillow a couple times.

Channel anger into creative activities:

- Listen to music or paint.
- Put your feelings into your artwork.

Relax:

- Listen to calming music.
- Meditate with yoga.
- Count to ten and then let out a deep breath.
- Just relax and think about cool stuff.

Get active:

- Take boxing or karate classes.
- Punch a punching bag.
- Run laps.
- Workout by doing some exercises.
- Play your favorite sport and imagine that whatever you are hitting, throwing, or bouncing is the thing that makes you the angriest.

Materials:

- copies of "Student Anger Behavior Surveys" (copy included)
- highlighters or bright-colored crayon for highlighting
- dry erase board and marker (or chalkboard and chalk)

PREVIEW

Lesson Presentation:

1. Ask students to tell you what time it is. Tell them that right now, it is time to deal with anger. Write the letters "T, T, D, W, A" down (not across) the board, and repeat "time to deal with anger."
2. Ask students if they have ever been angry. Allow some students to share some things that made them angry and how they handled their anger. Follow shared examples by asking the student if there were any consequences to the way he/she handled their anger.
3. Tell students that they will analyze the way they deal with anger as we all experience things that make us upset. Also, they will determine the best and worst ways to deal with anger if they were in an airplane or in outer space!
4. Distribute the "Anger Behavior Survey" to each student. Tell them to check all of the ways they honestly deal with anger here on Earth. Then, tell them to imagine that someone is on an airplane or spaceship. Have the students check how they think someone (not necessarily themselves) should handle their anger in that environment.
5. While students are completing the survey, distribute highlighters. Tell them that you will let them know what to do with the highlighters once everyone has finished the survey.
6. Once students have completed the survey, have them focus on the answers they marked in the "Earth" column. Discuss each "anger action" to determine the consequences of the action. While discussing each action, have the class decide if the suggestion is a positive or negative way to deal with anger. Have students highlight the anger actions that reflect a positive way to deal with anger. (2, 3, 7, 9, 10, 13, 16)
7. Ask students to share some of their answers regarding how someone would deal with their anger if they were in an airplane or spacecraft. Share some of the thoughts below as time permits. The number below represents the number on the survey sheet. (Survey sheet numbers 5, 9, 10, 13, and 16 are not included below as conducting such an action in an aircraft/space environment would yield similar consequences as on Earth.)
 - 1) An airplane and spaceship are very small. The problem with yelling or screaming is that you would disrupt others in the small place, and that is not fair to them. Did you know that if you could release your scream in space that it would not be heard? Space is a vacuum; therefore, sound waves cannot travel through space.
 - 2) There are pillows available on airplanes and spacecrafts!
 - 3) Astronauts can communicate with NASA, friends, and family using the Internet. They also use radios to communicate. If you become angry on an airplane, you could speak with a flight attendant about your problem.

PREVIEW

- 4) Pretending you are not angry when you are may prevent you from doing your work as well as you need to. You might make a terrible mistake because your mind is focused on your anger.
 - 6) If you kick or hit someone on an airplane, the police or transportation security administration (TSA) will likely be waiting for you when you land. If you kick or hit someone on a spacecraft, you could endanger yourself or crew as the person might float and hit a wrong button or lever.
 - 7) Astronauts on the space station must exercise about 2 hours a day! They have a treadmill and a stationary bicycle, just to name a couple things that they can do for exercise.
 - 8) If someone threatened to do this on a plane or spacecraft, they would probably be restrained (hands & feet tied) and would be taken away by police upon their return.
 - 11) While people have freedom of speech, it should not infringe on other people's rights not to have to hear inappropriate language. Additionally, some places, such as schools, have rules against using curse words. A person should be ready for the appropriate punishment if he/she chooses to break rules. If curse words are a problem, try substituting another word, perhaps a funny word, to try to get you back on track.
 - 12 and 14) There are probably no doors on a spaceship to slam other than the door (hatch) leading outside. Doors add unnecessary weight to a spaceship. Opening the hatch during a spaceflight isn't a good idea. Let's just say you won't have an opportunity to slam it if you open it, and it would be the last door you ever open. Run away? Nowhere to run to if you are traveling in a spaceship or on an airplane! Find a better way to handle the anger!
 - 15) If someone throws something in a spacecraft, it will continue floating. It will not eventually land on the ground.
8. Determine the best ways for those on airplanes or spaceships to handle anger. Do the best ways mostly match the best ways to handle anger issues here on Earth?
 9. Return to the "T, T, W, D" on the board. Ask student to help name positive ways to deal with anger using the letters on the board. A finished example may be:
 - T - Think** about the situation. Think of a good solution. Think before doing anything!!!
 - T- Talk** about the problem with someone who will give you fair advice.
 - D - Don't** hit or scream at anyone!
 - W - Write** it out!
 - A - Activity**, activity, activity! Exercise, punch a punching bag or pillow, or do some other relaxing activity like listening to music or taking deep breaths.

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Summarization:

Explain that everyone gets angry, and anger is okay as long as it is handled correctly. These are all good ways of dealing with anger which have one very important thing in common: none of them involve causing harm to you, other people, animals, or property. You'll have to figure out which one of the options works best for you the next time you realize it is time to deal with anger. Tell students that students with good character handle anger in positive ways, and encourage them to be students of good character!

Assessment:

- teacher observation
- student answers to class discussion questions
- survey worksheet

Additional activity ideas to enrich and extend the primary lesson (optional):

- Ask students to turn their survey sheet over and write, in order of preference, the things they plan on trying the next time they get angry.
- Provide an opportunity for students to write about anger. Ask students to write a descriptive paragraph about anger, or ask students to write an expository paragraph explaining ways to deal with anger. Allow students to write an "anger" acrostic poem.
- Divide students into groups of 3-4. Use the following anger scenarios for students to role-play both incorrect and correct responses.
 - 1) You are playing dodge ball at P.E. and someone hits you in the head with the ball.
 - 2) You are in line at lunch to put your tray away and someone rams you in the back with his/her tray.
 - 3) Someone borrows your new pencil, and they lose it.
 - 4) A person in the desk in front of you leans over to get a book out as you are walking by. His foot trips you, and you fall.
 - 5) You are walking in line back to your classroom and the person in front of you slams the door before you enter the room.
 - 6) Your class has been assigned a project. You are working with two other students. You've almost finished when one of the students spills a bottle of paint on your finished poster that goes with your project.
 - 7) Two students behind you are talking during class. The teacher thinks it is you, and the teacher gets on to you in front of the entire class.

Associated Literature and Website:

- *I'm So Angry, I Could Scream* by Laura Fox
- *Hot Stuff To Help Kids Chill Out: The Anger Management Book* by Jerry Wilde
- <http://www.angriesout.com/index.htm#kids>

PREVIEW

Anger Behavior Survey

Directions: Mark all behaviors here on **Earth** that you do when you get angry. (Be honest!!!) Then, mark all actions you think someone on an airplane or spaceship might do to best handle their anger.

EARTH	ANGER ACTION	AIRPLANE or SPACESHIP
	1. Scream at someone.	
	2. Yell or scream into a pillow.	
	3. Talk with someone about what is making you angry.	
	4. Pretend you are not angry.	
	5. Call people names or tease them.	
	6. Kick, push, bite, or hit someone.	
	7. Exercise.	
	8. Threaten to harm yourself or others.	
	9. Think about how to solve the problem.	
	10. Listen to music.	
	11. Curse.	
	12. Slam doors.	
	13. Write a letter or poem.	
	14. Run away.	
	15. Throw things.	
	16. Stop and take deep breaths.	



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Civil Air Patrol's ACE Program

Space Hockey Grade 4 Physical Fitness Lesson #3



Topic: hockey

Length of Lesson: 30 minutes

Objective:

- Students will work as teams to play the game of hockey, as one physically-active game that is a positive alternative to drugs, gangs, and negative lifestyles.

National Physical Education

Standards:

- NPH.K-12.1
- NPH.K-12.5
- NPH.K-12.6

A		Astros Team		C
S	G		G	O
T	O	sticks and pucks	O	M
R	A	(laser rods and asteroids)	A	E
O	L		L	T
S		Comets Team		S

Background Information:

Hockey is any of a family of sports in which two teams compete by trying to maneuver a ball, or a hard, round disc, called a puck, into the opponent's net or goal, using a hockey stick. The dominant version of hockey in a particular region tends to be known simply as hockey. Other forms are field hockey, ice hockey, street hockey, and roller hockey.

Materials:

- 2 tightly rolled and taped newspapers or soft bats
- a blackboard eraser or soft ball
- 2 chairs or goals (not too far apart)



Lesson Presentation:

1. Give students an overview of the game of hockey, as noted above. Explain that their game will be known as Space Hockey. Confirm that students understand that asteroids are huge rocks in space. There is an asteroid belt between Mars and Jupiter. Students will work to knock the asteroids out of the path of their space stations using the hockey sticks (laser rods) and pucks (asteroids).
2. Describe the rules and procedures of the game:
Divide students into 2 teams: the Astros and the Comets. Number each team from 1 to however many members in the team (e.g. if you have 20 students, each team will be numbered 1 - 10). If you have an odd number, give a sporty child 2 numbers.

Get the teams to sit down facing each other, on opposite sides of a basketball court. Put the equipment in the middle of the court and the goals at the 2 far ends.

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A	Astros Team				C
S	G	sticks and pucks (laser rods and asteroids)		G	O
T	O			O	M
R	A			A	E
O	L			L	T
S	Comets Team				S

- Allow each student to take a practice using the hockey "stick" (laser rod) to swing at the "puck" (asteroid) while aiming toward the goal.
- Begin the game. Call out a number. The 2 players with that number (1 from each team) run into the middle, grab a 'laser rod,' and try to hit the 'asteroid' through their goal. The first to do so gets a point for their team. Then they sit down and another number is called.



The game is over when a certain number of points are reached, each person has an opportunity to participate, or time is up.

Summarization:

Students should be reminded that playing such a game provides them with opportunities for exercise, enjoyment, challenge, self-expression, and social interaction. The purpose of knowing about and participating in game-like physical activities with others is to build a lasting desire to stay physically active and socially involved in positive ways. Having such an understanding and desire builds two critical strengths in their lives:

- a more physically fit and healthy body; and
- a life filled with positive alternative activities that will help them steer clear of detrimental activities, such as lethargy, drugs, gangs, alcohol, smoking, or other illegal or negative activities.

The students should also be reminded that they can each play a part in building these same strengths for their peers by always keeping an understanding and respect for differences among people while participating in such physical activity settings. This will enable others to want to participate physically and socially with them and others.



Assessment:

Observe the students as to:

Whether they listened and responded to their number.

Whether they demonstrated their understanding of the rules.

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Whether they respected differences physical abilities of other students.

Additional activity ideas to enrich and extend the primary lesson (optional):

- The game can become more difficult and challenging by calling 2 or 3 numbers at a time, or play as mini-teams.
- The teams have to be given a minimum or maximum number of swings prior to getting the puck into the goal. This helps to build strategic thinking while playing the game.
- Using the same rules as this game, each team should use another sport and come up with their own new sport. Students should be able to explain the new rules to the rest of the class so they can play the game. Thus, teams will be able to utilize both the mental and physical gifts of each team member for maximum benefit to the team.
- Utilize the following websites for more fabulous hockey activities:



Marble-ous Hockey: Purpose of Activity: Students will demonstrate controlled striking skills with a hockey stick while attempting to hit a target
<http://www.pecentral.org/lessonideas/ViewLesson.asp?ID=2932>

Hockey Highway - Purpose of Activity: For students to practice using soft taps to travel and change directions, while dribbling and dodging in general space.
<http://www.pecentral.org/lessonideas/ViewLesson.asp?ID=365>

Striking with a hockey stick - Purpose of Activity: Work as teams in a variety of situations by passing, communicating, respecting individual differences, helping each other.
http://www.sasked.gov.sk.ca/docs/physed/physed1-5/ep_plans6-9.html