

Balloon Explorium

Ballooning Activities for your Classroom

Objectives:

- to familiarize students with the history of ballooning.
- to expand student's vocabulary and concepts related to ballooning.
- to provide experiences that will motivate students to speak, listen, read, write, and question.
- to provide opportunities for students to express themselves through art and language skills.
- to expand math and science skills through hands-on activities related to a ballooning theme.

Vocabulary:

aerostat	descend	kevlar	quick release
altimeter	dropline	kynol	redline
altitude	envelope	launch	rozier
ascent	equator	load tape	skirt
ballast	fuel	maneuver	tethered
basket	gondola	Montgolfier	tie-off
blast valve	gore	nomex	throat
burner	helium	panel	transatlantic
cable	hook & pile	parachute top	uprights
cold inflation	hot inflation	pilot	variometer
crew	hydrogen	propane	vent
crown	inflate	pyrometer	vent line
deflate	inflator		

Resources:

- Albuquerque Journal / Tribune
- Ballooning magazine (Publication of the Balloon Federation of America)
- Balloon Life magazine
- The Romancing of Ballooning, The Story of the Early Aeronauts. Viking Press
- Hot Air Ballooning by Dick Brown
- Balloons by Peter Burchard
- Balloons and Ballooning by William Bixby
- Brave Balloonists by Esther Douty
- Twenty One Balloons by William Dubois
- Balloon Adventures of Paddy Pork by John Goodall
- Ballooning: The Complete Guide to Riding the Winds by Dick Wirth & Jerry Young
- Balloon Explorium web site – www.balloonexplorium.org

Manufacturers:

Aerostar International, Inc.
P.O. Box 5057
Sioux Falls, SD 57117-5057
www.aerostar.com

Cameron Balloons
P.O. Box 3672
Ann Arbor, Michigan 48106
<http://www.cameronballoons.com/>

Firefly Balloons
810 Salisbury Rd.
Statesville, NC 28667
<http://www.fireflyballoons.net/>

Lindstrand Balloons
228 Jefferson St., Box 686
Hanover, IL 61041
www.lindstrand.com

Organizations:

Balloon Federation of America
P.O. Box 400
Indianola, Iowa 50125
www.bfa.net

Albuquerque Aerostat Ascension Assoc.
P.O. Box 90160
Albuquerque, NM 87199-0160
www.hotairballooning.org

Activities:

1. Read and discuss the history of ballooning. Give students a handout or together make a class outline of the important events. They can then copy the outline and put it in a Ballooning Folder.
2. Students can list unfamiliar vocabulary in their folders. Discuss and define.
3. Write vocabulary word onto a hot air balloon shape. Attach magnetic strips to the back and have students alphabetize the words by placing them on a blackboard or metal surface. These can be balloon vocabulary words or words from their spelling or reading lessons.
4. Draw a diagram of a hot air balloon and label the parts.
5. Collect newspaper articles about ballooning events and make a bulletin board display.
6. Create a balloon mural with the Mountains, the volcanoes and mesas, or downtown skyline in the background. Write ads for the Balloon Fiesta to go with the mural.
7. Write a balloon manufacturer for information.
8. Measure out how tall a balloon is on the playground using chalk to mark the distance. How many students can fit if they lie end to end?
9. Using Balloon Adventures of Paddy Pork (a wordless picture book), have students write their own story versions or prepare a story to tell aloud to go with the pictures.
10. Learn balloon safety rules and write them in their Balloon Folders.
11. Have students write poems. Cinquains work well for this because they can be easily written on a balloon shape.
12. Create a class book of the students' best stories and poems. Students each choose one of their stories or poems to be proofread, revised, and published.
13. Design your own balloon T-shirt using fabric crayons or fabric paints.
14. Write story problems on measurement, about a long distance balloon trip. Have the students measure the distance on a state map with base ten blocks.
15. Cut up old Fiesta programs for games, i.e. memory games with balloon pictures. You need two of the same program for this.
16. Have students make their own balloon pins. Using shrink art plastic and permanent markers, trace small balloon pictures or have students design their own. Follow instructions on package for shrinking plastic. Plastic will shrink 60% of the original size. After the plastic has shrunk, glue a thumbtack to the back. Then add pin backs. Pin backs and plastic can be purchased at craft supply stores.

Science and Ballooning:

- Knowledge: Draw a picture of a hot air balloon.
- Application: Make a 3-dimensional model of a hot air balloon.
- Comprehension: Draw a diagram showing how a hot air balloon works.
- Analysis: Make a diagram of a hot air balloon labeling all of the parts and equipment. Explain why a hot air balloon rises.
- Evaluation: Decide whether blimps or hot air balloons have more advantages. Make a display showing your reasoning. Make a comic strip evaluating the safety of hang gliders and hot air balloons.
- Synthesis: Design a brochure promoting the hot air balloon for new and different purposes. Design a hot air balloon that will meet your personal needs (take you to and from school, stores, music lessons, etc.)

Art and Ballooning:

1. Paper-mache balloon – Inflate a balloon. Using either newspaper strips with flour and water paste or plaster bandage strips, cover the inflated balloon. Let dry and paint. Hang a basket underneath your painted balloon. Small baskets, strawberry baskets, or small milk cartons work well for this. Attach hook, string or fishing line so the balloon can be hung.
2. String Art balloon – Inflate a balloon. Cut embroidery floss into 2 to 3 foot lengths. Dip floss into starch and place over balloon. Let dry. When string is dry, pop balloon. Hang small basket or gondola made from milk carton underneath. Attach string or fish line loop at the top for a hanger.
3. Tissue Paper "Stained Glass" balloon – Inflate balloon. Use white or clear balloon, or use several layers of white tissue paper to begin with. This prevents the color of the balloon from showing through the tissue paper. Cut 1 to 2 inch wide tissue paper strips. Lay a strip over the balloon and coat with PVA or diluted white glue. Continue to cover the balloon in this manner. Several layers need to be applied. Let balloon dry. Hint: Tissue paper colors will bleed. So, be prepared. Cover work surface and students' clothes. If you use more than one color of paper, colors will bleed together and give a stained glass appearance. Hang small basket or gondola made from milk carton underneath. Attach string or fish line loop at the top for a hanger.
4. Sheet scraps balloon – Have students bring in old sheet scraps or cotton fabric scraps. Cut in 1 to 2 inches wide or in squares. Inflate a balloon. Dip fabric in liquid starch and cover the balloon. Let dry and pop the balloon. Hang small basket or gondola made from milk carton underneath. Attach string or fish line loop at the top for a hanger.

These are only suggestions. Be creative. Maybe you can figure out some other base besides a balloon, so students could make a special shape balloon. Don't forget to put a pilot and passenger in your basket.

Resource materials copyrighted 2008 by Balloon Explorium.

