

Science Story Adventures



Space Explorations

Learning outcomes

» Students know that Earth is one of several planets that orbit the sun and that the moon orbits Earth. (Grade 3 – Earth Sciences)

» Students know the sun warms the land, air, and water. (Grade 1 – Earth Sciences)

From: California's Science Content Standards

Books we read

You are the First Kid on Mars by Patrick O'Brien

Zoom! Zoom! Zoom! I'm Off to the Moon! by Dan Yaccarino

Activities we did

» We talked about what we might see if we could travel to outer space.

» We created a toilet paper model of our solar system to get a better sense of the relative distances of the planets. (<http://www.astrosociety.org/education/family/materials/toiletpaper.pdf>)

» We looked at photos of the planets and learned about some of the characteristics of each planet, as well as why Pluto is no longer considered a planet.

Today's craft: Make a Rocket Ship



You will need:

- » Rocket ship template (included)
- » Toilet paper roll
- » Cardstock
- » Stapler
- » Crayons
- » Scotch tape
- » Scissors

Directions:

1. Print out the rocket ship template on cardstock.
2. Decorate your rocket ship using crayons.
3. Cut out the different parts of your rocket ship.
4. Wrap the fuselage around a toilet paper roll and staple it on.
5. Cut four slits along the bottom of the fuselage, using the dotted lines as a guide.
6. Cut slits in the two triangles, using the dotted lines as a guide. Stick one triangle into the other using the slits and then slip the two triangles into the base of the rocket ship using the slits on the fuselage.
7. Turn the semicircle into a cone and secure it with tape. Tape the cone to the top of the rocket.

Adapted from <http://www.enchantedlearning.com/crafts/astronomy/rocket/>

Want to find out more?

Here is a selection of further resources to explore in the Naturalist Center, in the public library or at home. Please ask if you can't find what you're looking for.

Books

Across the Solar System by Rod Theodorou. Nat. Ctr. Juv. QB501.3 .T48 2006

This book journeys to every planet (and Pluto), providing a page of text and a fact sheet for each.

Boy, Were We Wrong About the Solar System! by Kathleen V. Kudlinski. Nat. Ctr. Juv. QB501.3 .K83 2008

An entertaining look at how we know what we know about the universe has changed over time.

Exploring the Solar System: A History with 22 Activities by Mary Kay Carson. Nat. Ctr. Juv. QB500.22 .C37 2006

More than just another activity book! Includes timelines, diagrams, historical photos, a field guide to the solar system, a glossary and a resource list.

The Magic School Bus: Lost in the Solar System by Joanna Cole. Nat. Ctr. Juv. QB500.22 .C64 1990

Ms. Frizzle drives the school bus on an out-of-this-world adventure.

Moonshot: The Flight of Apollo 11 by Brian Floca. Nat. Ctr. Juv. TL789.8 .U6 F56 2009

Travel with the astronauts that were the first humans to walk on the moon.

Zoo in the Sky: A Book of Animal Constellations by Jacqueline Mitton. Nat. Ctr. Juv. QB802 .M57 1998

Illustrations of many of the animal constellations accompanied by snippets of their myths.

DVDs

Space Science for Children. Nat. Ctr. Media QB500.22 .S63 2003

Set in space camp, this series of five DVDs covers stars, the earth, the moon, the planets and the sun.

Mars: Dead or Alive. Nat. Ctr. Media TL799.M3 M37 2004
Chronicles the 2004 mission of Spirit and Opportunity to the surface of Mars.

Websites

Design a Space Station

<http://www.childrensmuseum.org/cosmicquest/living.html>

Do you know what it takes to live in space? This interactive game lets you design a working space station that astronauts can live in for up to several months.

National Geographic – Pluto's Secret

<http://kids.nationalgeographic.com/Games/Action-Games/Plutos-secret>

Play this fun game with Nat and Geo to find out why Pluto is no longer considered to be a planet.

The Space Place

<http://spaceplace.jpl.nasa.gov/>

Create projects, play games, solve puzzles and more!

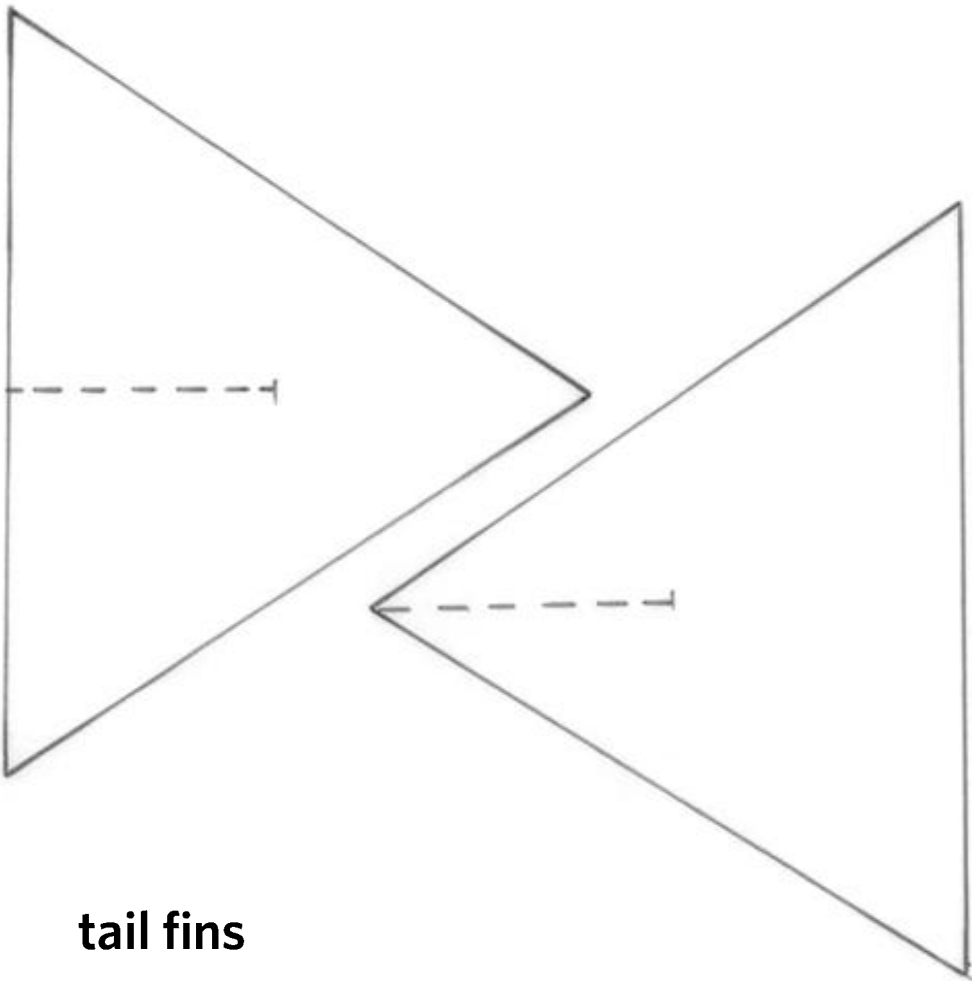
A Virtual Journey into the Universe

<http://library.thinkquest.org/28327/>

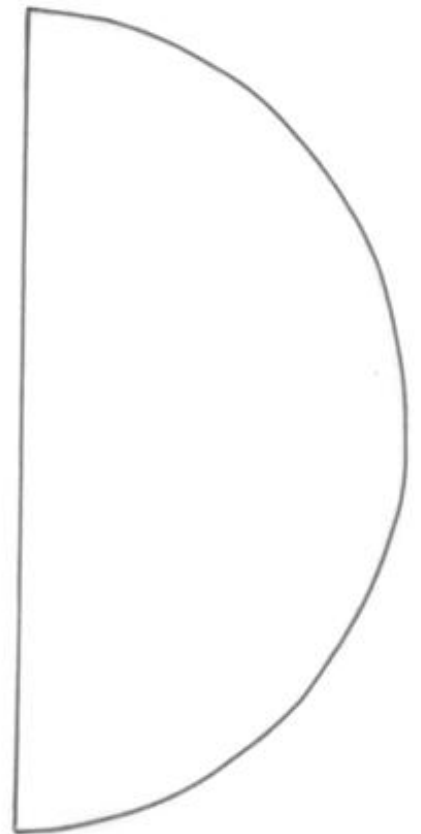
Images and animation help to highlight your info-packed tour of the universe.

Rocket Ship Template

fuselage



tail fins



nose cone