

Eight Days Gone

RIF EXTENSION ACTIVITIES FOR EDUCATORS

STEAM-THEMED: SCIENCE, TECHNOLOGY, ENGINEERING, ART, MATH

SCIENCE, MATH CREATING CRATERS

Materials: plastic washtub, 10lbs flour, cocoa powder, golf balls, ping pong balls, magnetic marbles, magnetic wand, small clear ruler

Place flour in the washtub in a layer several inches thick. Sprinkle cocoa powder over the top to represent the moon's top layer. Tell students that the moon has many craters. The moon has no atmosphere to protect it like the earth has, so objects frequently crash into it and form craters. Discuss which of your objects will make the deepest craters. Have students take turns dropping the objects into the flour. Measure the results with a ruler; record and discuss.

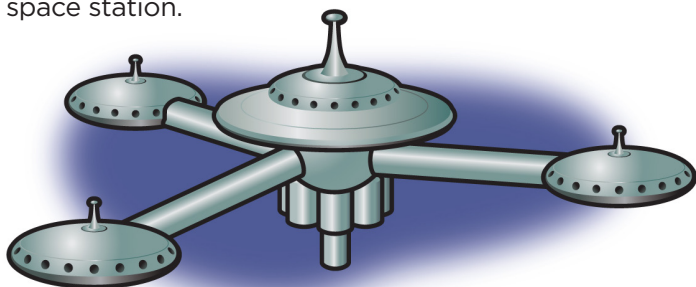
TECHNOLOGY, PHYSICAL EDUCATION

ASTRONAUT ATHLETICS!

Astronauts have to be in great shape to make the trip into outer space. Visit www.nasa.gov/audience/foreducators/trainlikeanastronaut/home/index.html for physical activities to help students train like astronauts!

ENGINEERING, ART, DRAMATIC PLAY, WRITING, LITERACY, SCIENCE SPACE STATION CONSTRUCTION

Excite your students' imaginations with their very own in-class space station. Use a refrigerator box as the space station body. Students can brainstorm ideas of what the space station should look like and be supplied with. Have them list their ideas and then have small groups of students carry out different parts of the construction. Place a basket of space-related books and writing materials for students to use while in the space station.



ART, SCIENCE, ENGINEERING, WRITING

RECYCLED ROCKETS!

Materials: egg cartons, paper towel tubes, pipe cleaners, scrap paper, milk cartons (pint), paint, markers, tape, glue, scissors

Provide students with several pictures of different types of spacecraft. Encourage them to come up with their own version of the ultimate vehicle for space travel. When construction is complete, students should write about their model. What makes it unique? Where is it going to travel? Why?

MATH, SCIENCE MOON SAND

Materials per small group: 6 cups play sand, 3 cups cornstarch, 1 1/2 cups cold water

Have children break into groups. Provide the following directions for making moon sand: "Mix cornstarch and water until mixture is completely smooth. This will take several minutes. Then use your hands to mix in the sand one cup at a time." Have each child take a turn doing one of the tasks. Encourage discussion about the consistency of the mixture. After playing with the moon sand, store in an airtight container.

MATH MOON ROCK MATH!

You can use a variety of objects to represent moon rocks for the following math ideas (e.g., speckled jelly beans, pebbles, rock candy).

- ◆ **Sorting:** Have students sort rocks by color, size, and shape.
- ◆ **Positional Words:** Use a cup to represent the lunar module and have students place rocks in, under, beside, over, and around.
- ◆ **Adding:** Use the rocks as manipulatives to add together two or more numbers.

