

## Walk Through Comets

Comets are 'leftovers' from the formation of our solar system around 4.6 billion years ago. They have been called "dirty snowballs." They are small celestial objects, made of ice, gas, dust, and a small amount of organic material, that orbit our Sun. There are about 1000 known comets and more are discovered each year.

Meteor showers occur when Earth passes through the dust and gas left by a comet along its elliptical orbit. The particles enter Earth's atmosphere and most burn up in a lively light show — a meteor shower. Some meteor showers, such as the Perseids in August and the Leonids in November, occur annually when Earth's orbit takes it through the debris path left along the comet's orbit. Comet Halley's trails are responsible for the Orionids meteor shower.

In this activity, you and your child will walk through the comet showers that occur throughout the year.

### What You Need:

- ☞ Comet Shower Floor Labels
- ☞ Ribbon, yarn or string (lots!)
- ☞ Tape
- ☞ Scissors
- ☞ Image of sun
- ☞ Something to represent the Earth (or tell the child that he/she will be earth!)

### What to Do:

- ☞ Tape Comet Shower floor labels in a large circle.
- ☞ Tape the image of the sun in the center of the circle.
- ☞ Hang several ribbons in groups above each of the floor labels, low enough that the children will be able to walk through them.
- ☞ Have the children orbit the Sun carrying the Earth, and invite them to read the labels on the floor to discover which comet shower can be seen during each month.

### Parent Prompts:

What happens to the dust falling off a comet? (It stays in space, moving around the Sun, until something—like the Earth—runs into it.)

What do we see on Earth when we pass through dust that has fallen off a comet?  
(Meteor Showers)

Why does the dust hit Earth? (Earth passes through the dust as it goes around the Sun)

# January

Quadrantid Meteor Shower

# April

Lyrid Meteor Shower

# May

Eta Aquarid Meteor Shower

# July

Delta Aquarid Meteor  
Shower

# August

Perseid Meteor Shower

# October

Orionid Meteor Shower

# November

## Leonid Meteor Shower

# December

## Geminid Meteor Shower

