Words to Know: Meteor, Meteoroid, Atmosphere, Leonids

It is always exciting to see a falling star. It is gone almost as soon as you see it. You point to where it was and stare at the dark sky. You hope that you will see another falling star.

What is a falling star? A falling star is not a star at all. It is not even part of a star. Stars do not fall. Our Sun is a star.

A falling star is a meteor. Meteors are streaks of light in the sky. The light is caused by a small speck of dust burning when it enters the Earth’s atmosphere.

The dust comes from comets. These pieces of comet dust are called meteoroids. Most meteoroids are smaller than a grain of sand. The flash of light is called a meteor. Meteors usually last just a second or two.

Sometimes, there are meteor showers. In a meteor shower, lots of shooting stars seem to fall from one area of the sky. These meteor showers happen when the Earth travels through a stream of dust following a comet.

Some people get comets and meteors mixed up. A comet is very different from a meteor. A comet is larger and travels slowly across the sky. It takes many days for a comet to leave our sky. A comet looks like a bright ball with a long shiny tail. A comet is a ball of frozen gas, dust, and water.

On November 19, 2002, we passed through a famous comet dust stream. When we flew through this space dust, the meteors seemed to shoot out of a group of stars called “Leo the Lion.” This meteor shower is called the Leonids.

In 1833, the Leonids caused a meteor storm. More than 1,000 meteors fell from the sky each hour. In 1833, falling stars covered almost the whole sky. It was wonderful.

Meteor storms do not happen often. They are exciting to watch. You may even see a big fireball!

To watch the shower, wake up so early that it is still dark. Around 1:00 in the morning would be good. Put on all your warm clothes. Take a sleeping bag and snacks. Lie down and look up. Keep your eyes open. Maybe you will be lucky and see a storm of shooting stars!
FALLING STARS: continued
Do You Know Your Comets from Your Meteors? Let’s See!

Directions:
Some of the following words and phrases describe comets. Some words and phrases describe meteors. Some words and phrases describe meteoroids. Write “comets,” “meteors,” or “meteoroids” by the appropriate words and phrases.

1. shooting stars
2. made of dust and ice
3. has a tail
4. speedy streak of light
5. smaller than a grain of sand
6. falling stars
7. lasts a second or two
8. travels slowly across the night sky
9. may come in showers or storms
10. remains in the sky for many days

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