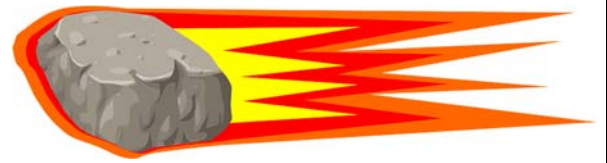


Name _____

Why Do Meteors Burn Up?



Reading Passage: When small space rocks, called meteoroids, enter Earth's atmosphere, they travel at extremely high speeds-sometimes faster than 40,000 miles per hour. As they fall through the atmosphere, they slam into gas particles like oxygen and nitrogen. This creates intense friction, which generates heat. The heat causes the meteoroid to glow brightly and, in most cases, break apart and vaporize. This glowing object is now called a **meteor**, or more commonly, a "shooting star." Most meteors are so small that they completely burn up before reaching the ground. Only larger ones survive the descent and land as **meteorites**.

Short Answer / Critical Thinking Questions:

1. Why does a meteoroid heat up when it enters Earth's atmosphere?
2. What causes the bright glow we see when a meteor streaks across the sky?
3. Most meteors never hit Earth's surface. Why do you think that is?
4. If a meteorite does reach Earth, what does that tell you about its size or material?
5. How might a scientist use a meteorite to learn more about the solar system?