Name _____

Speeding Through the Sky: How Fast Do Meteors Travel?

Multiple Choice Questions

1. What factors can influence the speed of a meteor?

a) Meteoroid size, Earth's location, and entry angle

b) Meteoroid size, the presence of clouds, and the time of day

c) Earth's location, the phase of the Moon, and the meteor's color

d) The meteor's composition, its distance from Earth, and its size

2. Why do smaller meteoroids tend to be slowed down more by the atmosphere?

a) Because they are made of denser materials

b) Because they are more aerodynamic

c) Because they have a greater surface area relative to their mass

d) Because they are attracted to Earth's gravity

3. How does a steeper entry angle affect the speed of a meteor?

a) It increases the meteor's speed

b) It decreases the meteor's speed

c) It has no effect on the meteor's speed

d) It causes the meteor to change direction

4. What is the typical range of speeds for meteors entering Earth's atmosphere?

a) 1,000 to 5,000 miles per hour

b) 25 to 160,000 miles per hour

c) 10,000 to 50,000 miles per hour

d) 500 to 2,000 miles per hour

5. During a meteor shower, what is the role of Earth's location in its orbit in relation to meteoroid speed?

a) Earth's location has no impact on meteoroid speed during meteor showers.

b) Earth's location influences meteoroid speed, making them move faster.

c) Earth's location influences meteoroid speed, making them move slower.

d) Earth's location affects meteoroid direction, not speed.