

Name \_\_\_\_\_

## Can We See Black Holes, or Are They Invisible?

### Short Answer

1. Explain why black holes are often described as "black" and why they do not emit visible light.
2. How do astronomers use the motion of nearby objects to detect the presence of a black hole?
3. Describe the concept of gravitational lensing and how it can help astronomers detect black holes.
4. What is an accretion disk, and how does it contribute to our ability to study black holes?
5. Explain the significance of the first-ever image of a black hole captured in 2019 and how it was achieved.

