

Name _____

What Is A Supermassive Black Hole?

Multiple Choice Questions

1. What is the event horizon of a black hole?
 - a) The point where light can escape its gravitational pull
 - b) A region with no gravity
 - c) The boundary marking the point of no return
 - d) A region of intense radiation

2. What distinguishes supermassive black holes from other black holes?
 - a) Their ability to emit light
 - b) Their tiny size
 - c) Their immense mass
 - d) Their location in distant galaxies

3. How do supermassive black holes continue to grow over time?
 - a) By capturing comets
 - b) By merging with other galaxies
 - c) By consuming nearby gas, stars, and even other black holes
 - d) By emitting intense radiation

4. Where are supermassive black holes typically found in galaxies?
 - a) In the outer regions of spiral galaxies
 - b) Near the galactic edges
 - c) At the centers of galaxies
 - d) In binary star systems

5. What method do astronomers use to measure the mass of supermassive black holes?
 - a) Studying their radiation emissions
 - b) Calculating their age
 - c) Tracking the orbits of stars and gas around them
 - d) Counting the number of galaxies in their vicinity

