

Name _____

Exploring the Mysteries of Black Holes

Multiple Choice Questions

1. What triggers the formation of a black hole?
 - A) A massive star's birth
 - B) A massive star's supernova explosion
 - C) A comet's collision with a star
 - D) A planet's gravitational collapse

2. What is the defining feature of a black hole?
 - A) Its high temperature
 - B) Its bright light
 - C) Its immense gravitational pull
 - D) Its fast rotation

3. Which type of black hole is found at the center of galaxies like the Milky Way?
 - A) Stellar black hole
 - B) Intermediate black hole
 - C) Supermassive black hole
 - D) Miniature black hole

4. What happens to objects that cross the event horizon of a black hole?
 - A) They are ejected into space.
 - B) They are teleported to another galaxy.
 - C) They are trapped and can never escape.
 - D) They become weightless.

5. How do scientists detect black holes?
 - A) By using powerful telescopes
 - B) By observing the color of their event horizon
 - C) By detecting X-rays emitted from hot gas around them
 - D) By capturing their visible light emissions

