Name _____

The Mystery of the Singularity: Inside a Black Hole

Multiple Choice Questions

1. What is the singularity at the center of a black hole?

A) A point of infinite volume

B) A location where physics breaks down

C) A place where matter is evenly distributed

D) A region of weak gravitational pull

2. What happens to an object once it crosses a black hole's event horizon?

A) It is ejected back into space.

B) It becomes trapped inside the event horizon.

C) It encounters no gravitational forces.

D) It transforms into a singularity.

3. Which characteristic describes the singularity at the center of a black hole?

A) Large volume

B) Finite density

C) Zero volume

D) Weak gravitational pull

4. Why is the singularity considered mysterious?

A) It is easily observable.

B) It follows the laws of physics.

C) It represents the limits of current physics theories.

D) It has been extensively studied.

5. What could the study of singularities potentially lead to?

A) A deeper understanding of quantum mechanics

B) A unified theory of physics

C) The discovery of new particles

D) The development of space travel