Name _____

The Cosmic Puzzle: Different Types of Black Holes

Short Answer Key

1. Stellar-mass black holes form from the remnants of massive stars that undergo supernova explosions. Their mass typically ranges from three to twenty times that of our sun.
2. Supermassive black holes, located at the centers of galaxies, influence the dynamics of galaxies and the formation of stars. They play a crucial role in shaping the structure of galaxies and regulating star formation.
3. Primordial black holes are a theoretical type of black hole that could have formed in the early universe. Their existence is still uncertain, and they could have a wide range of possible masses, from tiny to supermassive.
4. Intermediate-mass black holes have masses ranging from hundreds to thousands of times that of our sun, making them larger than stellar-mass black holes but smaller than supermassive ones.
5. The current status of microscopic black holes in astrophysics is that they are purely theoretical, and their existence has not been confirmed through observation.