

Name _____

Exploring the Mysteries of Our Galaxy: Are There Black Holes in Our Milky Way?

Multiple Choice Questions

1. What is the Milky Way?

- A) A chocolate bar
- B) Our home galaxy
- C) A meteor shower
- D) A distant planet

2. What are black holes?

- A) Regions in space where light can escape
- B) Massive stars that emit intense radiation
- C) Invisible regions with intense gravitational pull
- D) Celestial bodies made of dark matter

3. How do astronomers detect black holes in the Milky Way?

- A) By observing the orbits of nearby stars
- B) By analyzing meteor showers
- C) By studying the composition of distant planets
- D) By listening to sounds from space

4. What are X-ray binaries, and how are they related to black holes?

- A) Binary star systems that emit visible light
- B) Binary star systems that emit X-rays due to the presence of a black hole
- C) Binary star systems with black holes that emit gamma rays
- D) Binary star systems where both stars are made of dark matter

5. What is a supermassive black hole, and where is it typically found?

- A) A tiny black hole in the outer regions of galaxies
- B) A black hole with the mass of a single star
- C) A black hole in the Milky Way's core with a mass millions or billions of times that of our Sun
- D) A black hole located at the edge of galaxies

