

Name _____

Cosmic Collisions: Can Black Holes Merge Together?

Short Answer

1. Describe the "death spiral" that two black holes in a binary system undergo before merging.
2. How do gravitational waves provide information about black hole mergers, and why is this significant for astrophysics?
3. Explain the role of massive stars in the formation of binary systems of black holes.
4. What is the primary difference between the binary system of black holes and the final result of a black hole merger?
5. Discuss one significant discovery or insight gained from the detection of gravitational waves from black hole mergers.

