

SS Physics I

"The First Ever Image of a Black Hole"

No. _____ Name _____

1. Listen to the class and fill in the blanks with the most appropriate word.
The first letter is already given.

- (1) The black hole in the picture is at the center of the g_____ M87.
- (2) Einstein's general t_____ of relativity predicted the e_____ of the black hole.
- (3) The e_____ horizon is a point where gravity is so strong that not even l_____ could escape.
- (4) One light year is the d_____ that light can travel in a year.
- (5) Massive stars become n_____ stars or black holes at the end of e_____.
- (6) The VLBI method is useful for only invisible r_____ waves, not for visible optical light and so on.
- (7) Accretion means that gas and dust collide with each other by g_____.

2. Answer the following questions.

- (1) How long wavelength of radio wave did astronomers use to observe black holes?
- (2) What is brightening around the black hole?