

1. The light from a star moving away from us would be experiencing:

- a. Redshift
- b. Blueshift
- c. Greenshift
- d. Whiteshift

2. What force causes galaxies to move away from one another?

- a. Electromagnetic force
- b. Gravity
- c. Friction
- d. Energy left over from the Big Bang

3. Which of the following happens before a black hole comes into existence?

- a. Gravity ceases to exist in a certain region of space
- b. A new star is born at the center of a galaxy
- c. An old star collapses in on itself
- d. The fabric of spacetime is ripped by a star or planet

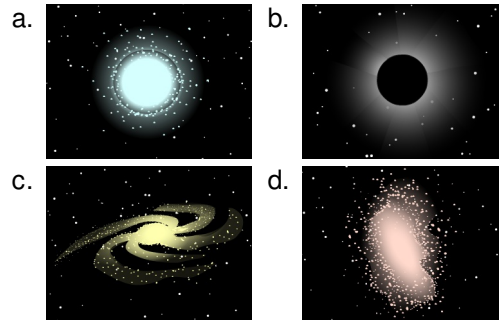
4. About how old do scientists think the universe is?

- a. 14 million years
- b. 140 million years
- c. 14 billion years
- d. 140 billion years

5. Astronomers categorize galaxies into a handful of basic shapes. What can you conclude from this fact?

- a. Galaxies all come from the same planetary nebula
- b. Galaxies are generally all formed by the same forces
- c. The number of stars in a galaxy determine its shape
- d. All galaxies have about the same number of stars

6. Which of the following represents an elliptical galaxy?



7. From the information presented in the movie, what can you conclude about dark matter?

- a. It is made up of black holes
- b. It holds a lot of the universe's mass
- c. It's solid, not liquid or gaseous
- d. Planet Earth contains trace fragments of it

8. How are elliptical galaxies different from spiral galaxies?

- a. They contain older stars and less gas and dust
- b. They contain younger stars and more gas and dust
- c. They are bigger than spiral galaxies
- d. They are smaller than spiral galaxies

9. What would happen to galaxies without gravity?

- a. They would spin faster
- b. They would contain stronger black holes
- c. They would contain more stars
- d. They would fall apart

10. Which of the following is a true statement about irregular galaxies?

- a. They are older than other types of galaxies
- b. They all contain massive black holes at their centers
- c. They contain relatively little gas and dust
- d. They consist mainly of young stars