Name _____

How Do Astronomers Study the History of Galaxies?

Multiple Choice Questions

1. What happens when astronomers observe distant galaxies through telescopes?

a) They see galaxies as they are in the present.

b) They see galaxies as they were in the distant past.

c) They only observe nearby galaxies.

d) They can't observe galaxies in deep space.

2. Which tool is indispensable for astronomers to study galaxies in deep space?

a) A microscope

b) A spectrometer

c) A telescope

d) A ruler

3. How does spectroscopy help astronomers study galaxies?

a) It reveals the age of galaxies.

b) It provides information about the colors of galaxies.

c) It breaks down starlight and reveals details about the composition, temperature, and motion of stars.

d) It measures the distance between galaxies.

4. What phenomenon is observed when galaxies appear to have a reddish tint?

a) Blue shift

b) Spectral lines

c) Redshift

d) Cosmic expansion

5. What is the Hubble Deep Field, and why is it significant in astronomy?

a) It is a project to clean Hubble's lens.

b) It is a patch of the sky with no galaxies.

c) It is an image containing thousands of galaxies observed in deep space.

d) It is a mission to study stars in our solar system.