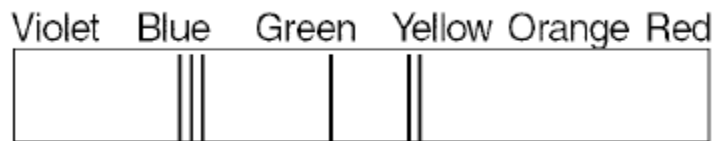


Name: _____

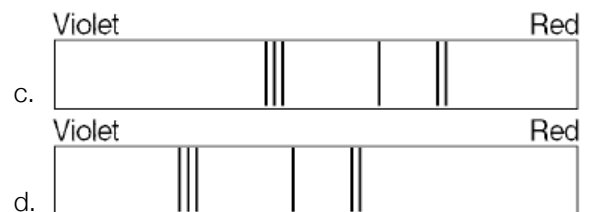
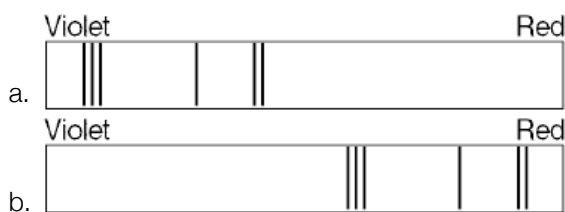
Date: _____ Period: _____

Worksheet: The Universe

- Based on the red-shift data on galaxies, most astronomers infer that the universe is currently
 - fixed and stationary
 - moving randomly
 - contracting
 - expanding
- Background radiation detected in space is believed to be evidence that
 - the Universe is contracting
 - galaxies are evenly spaced throughout the Universe
 - the Universe began with a primeval explosion
 - all matter in the Universe is stationary
- A comparison of the age of the Earth obtained from radioactive dating and the age of the universe based on galactic Doppler shifts suggests that
 - the Earth was formed after the universe began
 - the Earth is immeasurably older than the universe
 - the two dating methods contradict one another
 - the Earth is about the same age as the universe
- The diagram below shows the standard dark-line spectrum for an element. The spectral lines of the same element are observed in light from four distant galaxies.



Which spectral lines most likely represent the galaxy farthest from the Earth?



- In which group are the parts listed in order from oldest to youngest?
 - universe, Milky Way, solar system
 - solar system, Milky Way, universe
 - universe, solar system, Milky Way
 - Milky Way, solar system, universe