For each of the following telescopes, identify which kind of light it is primarily used for:

1) Hubble Space Telescope  a) radio  b) visible  c) X-ray  d) gamma ray
2) Chandra  a) radio  b) visible  c) X-ray  d) gamma ray
3) The VLA  a) radio  b) visible  c) X-ray  d) gamma ray
4) Which type of light has a longer wavelength?  a) visible  b) ultraviolet
5) Which type of light has higher energy photons?  a) visible  b) infrared
6) Which type of telescope is more similar to a standard reflecting telescope for visible light: a radio telescope or an X-ray telescope? (Note: There may be more than one correct answer. For full credit, defend your answer by stating, briefly, why you chose your answer.)

7) Describe how Cepheid variable stars can be used to find distances.

8) What method do astronomers use to find the distance to a very distant quasar? (Note: You don’t have to describe how the method works; you only need to identify it correctly.)

9) Describe how you can use the spectrum of an object to determine its motion relative to Earth.

10) Describe one of the two methods for finding the temperature of something from its spectrum. (Use the back of this sheet for your answer.)