Galaxy Classification Questions

Name:__________________________

1. What type of galaxy has more young stars, gas and dust-- elliptical or spiral? Where, in the galaxy, is the gas and dust seen?

2. What type of galaxy appears to have more old, red stars and fewer young blue stars-- elliptical or spiral? In both galaxy types, where are the old, red stars typically seen?

3. Given what you now know about the different types of galaxies, what is an S0 (lenticular) galaxy? E.g. a young, newly formed galaxy, a middle aged/older galaxy, something else? Explain your answer.

4. What type of event(s) do you think would have happened to cause the odd shapes of irregular (Sm) galaxies?

5. The color images of galaxies use 3 main colors-blue, red, and yellow- what type of light does each color represent?

6. Many galaxies, when observed directly through a telescope, do not appear as beautiful and colorful as the color images that you have seen. Where do the colors in these images come from?
7. On the Diagram below, draw and label the different galaxies on Hubble’s Tuning Fork.

7. In your own words, describe how the galaxies change as you move down the fork, i.e. what are the changes in the galaxies' properties as you look at different subtypes?