



### **Critical Thinking – Summarizing the Solar System**

Work with a partner and answer the following questions.

1. Label each of the objects in this image.
2. Identify differences in the chemistry of the inner terrestrial planets and the outer gas giants. Be sure to indicate the planets that fall into each group.
3. Identify one distinctive “nonEarth-like” feature about each object.
4. What was the source of heat to the solar nebula? What is the source of Earth’s heat? Is heat important in our Solar System? Why?
5. Describe the phase called planetesimal accretion. What major processes occurred then?
6. What is unique about Earth compared to the other planets? Describe differences and similarities in the chemical composition of the planets.
7. What is the future of our Solar System? Will it continue to exist forever? If not, what major events lie in our future?
8. Write a timeline of events in the formation of the Solar System and the modern planets.