**Study Guide: Comets, Meteors, and Asteroids**

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_ Block \_\_\_\_\_\_\_\_\_\_\_

1. What ingredients make up a comet?
2. What ancient beliefs were associated with comets?
3. Asteroids have a(n) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ shape orbit.
4. Where are most asteroids located? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. What risks do asteroids pose to the Earth (discuss time & destruction)?
6. What is the difference between a meteor, meteorite and meteoroid?
7. What are the three main types of Meteorites? What are they made of?
8. What are the three sub types of a stony meteorite? Describe each.
9. What three factors determine if a meteor will strike the Earth?
10. What is a fire ball?
11. What is a meteor shower?
12. What are two theories to how the dinosaurs died?
13. What two places do comets come from?
14. What are seven signs of an impact crater?
15. How are asteroids, comets and meteors interconnected?
16. What does NEA, NEO, and ECA stand for?
17. Draw a comet and label ALL the parts of it.
18. How do asteroids/comets get named?
19. List the destruction to Los Angeles caused by a 130-ft asteroid.
20. Can a 11-km asteroid produce a magnitude 10+ earthquake?
21. Draw Earth’s orbit around the sun, and show the orbit of an Aten, Apollo and Amor asteroid around the sun too.
22. What are a C-type, M-Type, and S-type Asteroid and what properties do they reflect?
23. Show the orbit of a comet around the sun, show how it’s two tails change as it approaches and then leaves the sun.
24. What are two theories of how the asteroid belt formed?
25. Why do astronomers love to study meteors? What do they tell us about our solar system?
26. How can an asteroid produce three different types of meteoroids?
27. How is a meteor shower created?