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

**Introduction to Comets, Meteors and Asteroids**

<https://www.youtube.com/watch?v=tqOmAA0HlEM> (2 min)

1. What is the difference between a comet, meteor and asteroid?

<https://www.britannica.com/place/Meteor-Crater>

1. Meteor Crater in Arizona is the best-preserved crater in the world. Describe the various features around and in the crater that was detected over the years.

<https://www.youtube.com/watch?v=ClW3EB8Ptuw> (13 min)

1. What are meteorites and where do most of them originate from?
2. What are the 3 types of meteorites?
3. What are chondrites and chondrules?
4. What does it mean for a meteorite to be differentiated? Versus undifferentiated?
5. What are some signs of a meteorite? (list at least 5)
6. Iron meteors have what sort of pattern when they are cut and polished?
7. What are the green crystals in a stony-iron meteorite?
8. What are the signs of meteors wrongs?

<https://www.youtube.com/watch?v=gY0zDyCnH_4>

1. Event #10-Halley’s Comet. What is special about Halley’s comets?
2. When will it appear next?
3. Halley’s fragments create what?
4. Event #9- What will happen and when?
5. Event #8-What is special about this solar eclipse?
6. Event #7- What is the chance of seeing a supernova in your life? (when will it occur)
7. Event #6- What is occulted?
8. Event #5 Leonind Metor shower. What is the cause of it and what will be special about it in 2031?
9. Event #4: What will happen in 2040?
10. Event #3: When is the next big super moon?
11. Event #2: When do we plan to have humans on Mars?
12. Event #1: What will happen to the constellation Cygnus? What will cause this?

<https://www.youtube.com/watch?v=CGhXsC_xTQ8>

1. What was the cause of the dinosaur extinction?
2. What evidence do we have for this? ( discuss K-Pg boundary, tektite).
3. Where did the dino-killing event occur?
4. Why did the planet heat up then cool down from this event?

<https://www.youtube.com/watch?v=kpLY0YwMACE> (interesting video to watch)

What are the 7 features of an impact crater? (Lecture notes in class)