Introduction to Comets, Meteors and Asteroids

https://www.youtube.com/watch?v=tqOmAA0HIEM (2 min)

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

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

2. 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=CIW3EB8Ptuw (13 min)

- 3. What are meteorites and where do most of them originate from?
- 4. What are the 3 types of meteorites?
- 5. What are chondrites and chondrules?
- 6. What does it mean for a meteorite to be differentiated? Versus undifferentiated?

- 7. What are some signs of a meteorite? (list at least 5)
- 8. Iron meteors have what sort of pattern when they are cut and polished?
- 9. What are the green crystals in a stony-iron meteorite?
- 10. What are the signs of meteors wrongs?

https://www.youtube.com/watch?v=gY0zDyCnH 4

11. Event #10-Halley's Comet. What is special about Halley's comets?

- 12. When will it appear next?
- 13. Halley's fragments create what?
- 14. Event #9- What will happen and when?
- 15. Event #8-What is special about this solar eclipse?
- 16. Event #7- What is the chance of seeing a supernova in your life? (when will it occur)
- 17. Event #6- What is occulted?

- 18. Event #5 Leonind Metor shower. What is the cause of it and what will be special about it in 2031?
- 19. Event #4: What will happen in 2040?
- 20. Event #3: When is the next big super moon?
- 21. Event #2: When do we plan to have humans on Mars?
- 22. Event #1: What will happen to the constellation Cygnus? What will cause this?

https://www.youtube.com/watch?v=CGhXsC xTQ8

- 23. What was the cause of the dinosaur extinction?
- 24. What evidence do we have for this? (discuss K-Pg boundary, tektite).
- 25. Where did the dino-killing event occur?
- 26. 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) 27.