## Armageddon (1998)

## Geological review questions based on the movie

This is a list of geological questions based on the movie *Armageddon*. Some of the questions can be answered while watching the movie, while others will need extra research on the internet. Some will be both. This is to help broaden your understanding of the geological world and how Hollywood can distort basic scientific principles to make a hit movie.

- 1. When was the impact that killed the dinosaurs?
- 2. When describing the impact that killed the dinosaurs it is mentioned in the movie as having the force of 10,000 nuclear weapons. Why is this a poor measure of energy?
- 3. How high up are geosynchronous satellites usually orbiting?
- 4. Being that high up, would you expect the meteors that hit the shuttle and the satellite to have a fire trail?
- 5. How should meteors fly in relation to one another in a meteor shower? Why?
- 6. Compare the movement of the meteors/meteorites in the movie. Do they differ from how they should fly? If they do, how?
- 7. What are the largest and second largest asteroids in the asteroid belt? How do they compare to the asteroid size in the movie? (Assume the diameter of Texas is 780 miles)
- 8. What are some of the methods they come up with to destroy or move the asteroid? Will they work or not? Why?
- 9. What caused the asteroid to hit the Earth? Is this possible? Is it possible with a far smaller asteroid?
- 10. The Russian Space Station that they fly to is better known as what? Why would it not be possible to dock at the station if the movies took place today?
- 11. Does the Russian Space Station have "artificial gravity" in real life?
- 12. Has the "gravitational slingshot" ever been done in real life or is this a product of science fiction. If it has, when?
- 13. What would the surface of the asteroid actually look like and why? Like the one in the movie? Like the Earth? Like the moon?
- 14. Would drilling an 800 ft hole in a 780 mile wide asteroid actually do anything in your own opinion?
- 15. What would you do faced in a similar situation?