

**Answer all questions in the space provided. Please write in complete sentences. If you have any questions, raise your hand. 100 points possible.**

**1 (5 pts)** There are at least a million asteroids in the asteroid belt. Explain why the Voyager spacecraft survived its trip through the asteroid belt undamaged.

**2 (5 pts)** Describe one piece of evidence that makes us think a 10 km asteroid hit the Earth 65 million years ago.

**3 (6 pts)** How does the gross composition of worlds inside the Asteroid belt (e.g. Mercury, Earth, ...) differ from worlds outside it (e.g. Europa, Ganymede, ...)?

4 (5 pts) What property of a gas makes it a good “greenhouse gas”? [don’t say “because it causes the greenhouse effect”]

5 (12 pts) Explain how the greenhouse effect works. Use Venus’ atmosphere as an example.

**6 (6 pts)** In class I said that Carbonaceous Chondrite meteorites are composed of “primitive” materials. Describe what is meant by “primitive” materials?

**7 (10 pts)** Explain how we know that not all of the asteroids in the asteroid belt are made of “primitive” materials.