The Gravity and Motion DCN

1. What did Aristotle believe about the rate at which an object falls?

2.Which scientist questioned him? What did he believe and how did he prove it?

3. Why do objects fall at the same rate of speed?

4. What is the acceleration on Earth caused by gravity?

5. Define air resistance.

6. What happens to air resistance as speed increases?

7. What is terminal velocity?

8. What is a freefall? Which two places can a free fall occur?

9. What does the force of gravity depend on?

10. Why do objects appear to be weightless in space?

11. Which 2 types of motion cause an object to orbit another object?

12. A rock at rest falls off of a tall cliff and hits the valley below after 3.5 s. What is the rock's velocity as it hits the ground?

13. A penny at rest is dropped from the top of a stairwell. What is the penny's velocity after it has fallen for 2 sec?

14. If a sledgehammer and a feather were dropped at the same time on the moon, which one would land first?