



Vocabulary: Free Fall Tower



Vocabulary

- Accelerate – to change speed or direction.
 - In common speech, “accelerate” usually means to speed up. In reality, any change in speed (speeding up or slowing down) is considered acceleration.
- Air resistance – the force of air pushing against a moving object.
 - Air resistance is also called *drag*.
 - Air resistance increases as speed increases.
 - Air resistance also increases as surface area (size) increases.
- Free fall – falling motion caused by the force of gravity.
- Gravity – the force of attraction between all objects in the universe.
 - Earth’s gravity causes objects to fall to Earth’s surface.
 - Gravity is only significant when one of the objects is very large, like the Earth. There is very, very little gravitational attraction between you and your couch – but there is some!
- Terminal velocity – the constant speed that an object falling through air approaches
 - At terminal velocity the force of gravity pulling down is balanced by the force of air resistance pushing up.
- Vacuum – a region that contains no matter.
 - Outer space is very nearly a vacuum.
 - The Moon has no atmosphere, so the area above the Moon’s surface is also nearly a vacuum.

