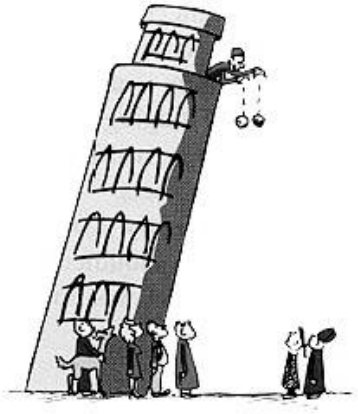
Name: _____ Date: _____ Period: _____

Objects in Free Fall

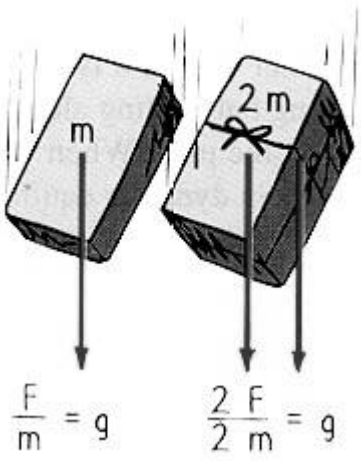


Galileo Galilei proved "common sense" _____ when he showed that heavier objects do not fall faster than lighter objects.

He showed this by _____

When an object is falling only under the influence of _____, we say the object is in _____.

While in free fall, other forces such as _____ can be neglected.



Gravitational force (weight) is _____ to mass.

Double the _____ and the _____ force will be doubled also.

Ratio of weight to mass is always the same_____

In this class, we will round this to_____

Usually, the _____ on a falling object is not negligible.

Because of this, the acceleration on a falling object is usually _____$10m/s^2$.

Air drag depends on two things:

1) The _____of the falling object

2) The _____ of the falling object

When the force due to air drag is equal to the force due to weight, the object reaches a _____

At this time, the net force on the object is equal to _____ and no _____occurs.

Terminal velocity is a _____velocity.