

Definition of Inertia:

Finish the phrase:

Objects at rest \_\_\_\_\_

Unless an \_\_\_\_\_  
force acts on it.

Example:

Diagram of forces acting on example:

Newton's First Law  
of Motion  
(The Law of Inertia)

Finish the phrase:

Objects in motion \_\_\_\_\_

at a \_\_\_\_\_

Unless an \_\_\_\_\_  
force acts on it.

Example:

Diagram of forces acting on example:

Other examples of objects obeying  
Newton's First Law of Motion:

1)

2)

3)

If any of these objects begin to accelerate, what  
do you know has occurred?