

Lesson 2 Newton's First Law

Predict three facts that will be discussed in Lesson 2 after reading the headings. Record your predictions in your Science Journal.

Main Idea

Identifying Forces

I found this on page _____.




I found this on page _____.

I found this on page _____.

I found this on page _____.

Details

Draw the described forces. Use labeled arrows to indicate the forces on a box, and show the net forces in the column to the right.

Description	Drawing	Net force
1. A force of 200 N to the left and another force of 50 N to the left		
2. A force of 100 N to the right and a force of 80 N to the left		
3. A force of 180 N to the right and a force of 180 N to the left		

Identify the forces in the table above as balanced forces or unbalanced forces.

1. _____
2. _____
3. _____

Lesson 2 | Newton's First Law (continued)

Main Idea

Newton's First Law of Motion

I found this on page _____.

I found this on page _____.

I found this on page _____.

Why do objects stop moving?

I found this on page _____.


Details

 **Summarize** Newton's first law of motion.

If the net force on an object is zero,

an object at rest _____

an object in motion _____


 **Contrast** the motion of objects acted on by balanced and unbalanced forces.


object's motion + _____ forces


= _____ velocity

object's motion + _____ forces

= changed _____

 **Explain** the effect of inertia on objects at rest and objects in motion.

 **Summarize** how friction and inertia act on an object sliding on a flat surface.

 **Synthesize It** Look at the objects around you that are at rest. Explain why they are subjected to net forces of zero as opposed to no forces at all.
