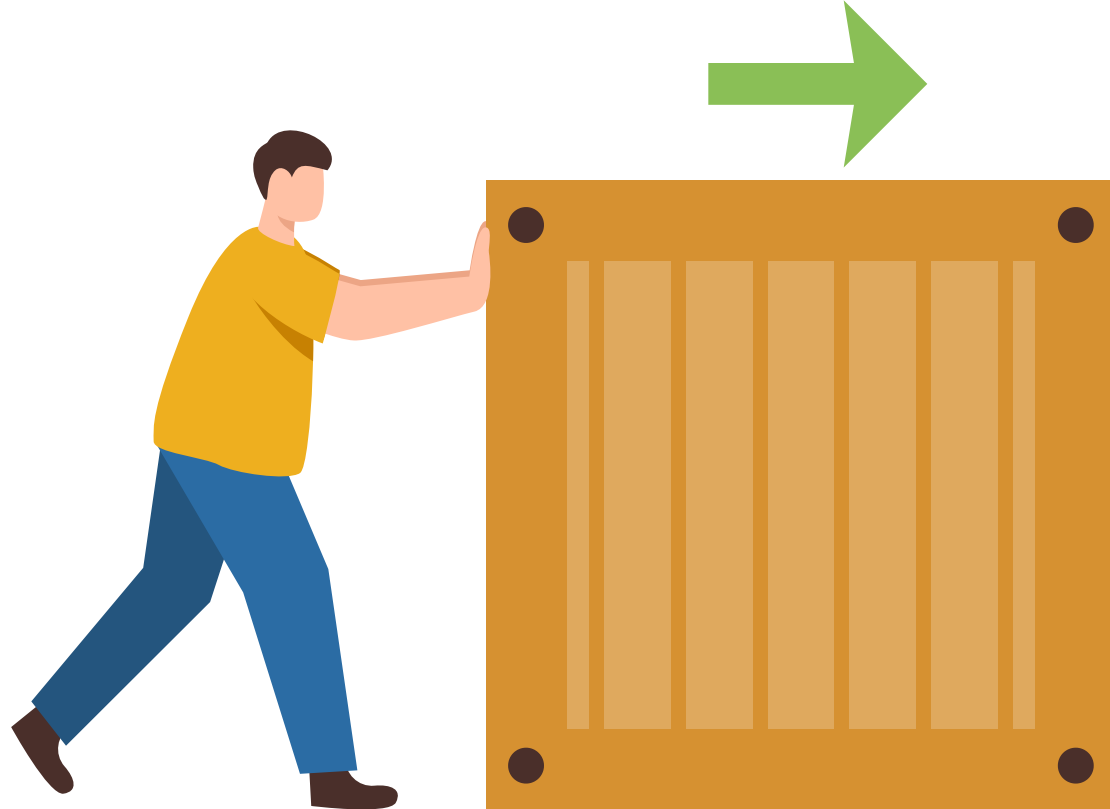


Newton's First Law of Motion

- ✓ **Teaches:** Newton's 1st Law of Motion including Theory, Applications, and Student Activities.
- ✓ **Ideal for Middle School Science**
- ✓ **No-Prep Resource**



UPGRADE to the Bundle

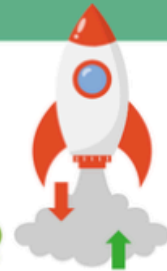
CLICK HERE

The Bundle Includes

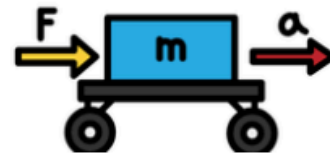
- Lesson on all 3 Laws
- 3 Activities on Newton's 1st Law
- Student-Led Lab on Newton's 2nd Law
- Newton's 3rd Law Activity

Newton's Laws of Motion Lesson & Activity Bundle

- ✓ **Teaches:** Newton's Laws of Motion including the lesson, student-led lab, 4 activities, and one 1 worksheet.
- ✓ **Ideal for Middle School Science**
- ✓ **No-Prep Resource**



$$F_{\text{net}} = ma$$



Your Lesson

✓ **Key Concepts Explained Simply:**

Newton's 1st Law of Motion including Theory, Applications, and Student Activities.

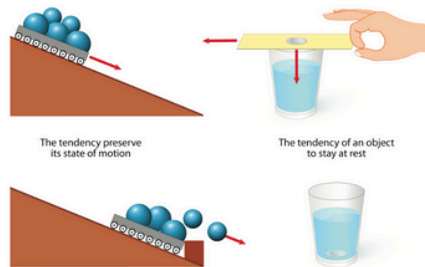
✓ **Ideal for Middle School Science:**

Supports Physical Science units with concise, structured content.

✓ **No-Prep Resource:** Ready-to-use lesson outline perfect for notes, review, or sub plans.

Newton's 1st Law of Motion

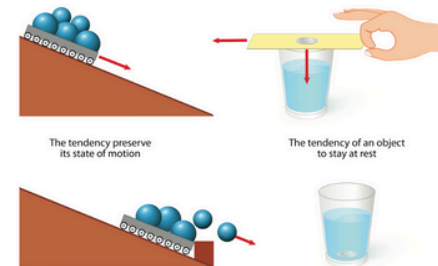
If an object is not moving, it will continue to not move.



Newton's 1st Law of Motion

If an object is not moving, it will continue to not move.

If it is moving, it will continue to move with the same speed in the same direction.



- Have your students complete the student version of the notes while you teach
- Student notes come mostly filled in so students can spend more time listening and less time copying notes.

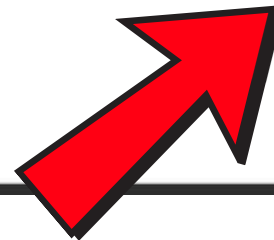
Newton's 1st Law of Motion

Isaac Newton came up with three laws that help us understand how things move.

The first law states that if the net force acting on an object is zero, that object's speed stays the same.



Sir Isaac Newton



Videos embedded in directly into your slides. One-click access.

THREE Newton's 1st Law Activities

Newton's 1st Law of Motion – Student Lesson Outline

What is a Force?
A force is a push or pull.

Force Overview – include the diagram in your notes

- _____
- The net force is the total of all the forces acting on an object
- The net force below is zero because there are equal forces acting left and right on the object

Force Overview
When the net force = 0, we say the forces are balanced.

Force Overview

How Does It Fly?

Newton's 1st Law of Motion
Isaac Newton came up with three laws that help us understand how things move.

Newton's 1st Law of Motion
If an object is not moving, it will continue to not move.

Seat Belts and Airbags

- An example happens when a car slows down quickly
- Due to Newton's 1st Law, the people in the car continue moving forward when the car slows quickly and can crash their heads
- _____

Try It Out

- Use the following simulation to test out Newton's 1st Law
- Click the forward arrow once to give the box a 50 N push then push the back arrow to remove the force
- What happens to the box? Does it continue its motion? What happens if you apply a 50 N force in the opposite direction while it is moving?

Includes student notes in easy-to-fill-in formats.

Newton's 1st Law of Motion

Activity 1: Coin and Card Inertia Challenge

Objective:

Students will demonstrate inertia by observing how an object at rest stays at rest unless acted upon by an unbalanced force.

Materials:

- Index card (or playing card)
- Plastic cup (clear if possible)
- Coin (quarter or similar)

Instructions:

1. Place the cup upright on a table.
2. Lay the index card flat across the top of the cup.
3. Place the coin in the center of the card.
4. Flick the card sideways quickly with your finger.
5. Observe what happens to the coin.
6. Record your observations and explain why the coin falls into the cup instead of moving sideways with the card.
7. Repeat the experiment with different flicking speeds (slow vs. fast).
8. Answer the following reflection questions:
 - How does this demonstrate Newton's First Law of Motion?
 - What would happen if the card is pulled slowly? Why?
 - How does the balance of forces change during the flick?

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Important: Before you click, make sure you're signed in to the Google account you'd like the resources placed into. If the resources are added to the wrong account, simply sign out and then into the correct one and repeat the process.

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Google Classroom Ready
One-Click Google Slides Access

Who is it for?

- ✓ Middle School Science Teachers
- ✓ Teachers using NGSS or TEKS
- ✓ Teachers who want to increase student engagement and retention
- ✓ Teachers not looking to reinvent the wheel
- ✓ Teachers who don't want to spend all their time prepping