What's The Matter?

3rd Grade Science News

Welcome

Welcome to Our Science Lab!
This quarter, we're diving deep into the exciting world of matter—and no, it's not just a big deal, it's what everything is made of! From solids and liquids to why some things dissolve and others don't, your young scientists are mixing, observing, and experimenting their way through hands-on investigations. We're so excited to be exploring the states of matter together and can't wait to see curiosity dissolve into discovery!

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What's the Matter with Science?

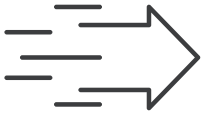
Just like matter can change form, so do the topics we explore in 3rd grade science! This quarter, we're focusing on how materials interact with water, but throughout the year, we'll shift states—exploring everything from ecosystems to energy, and Earth's incredible systems.

Scientific & Engineering Practices

demonstrate an understanding of scientific & engineering practices

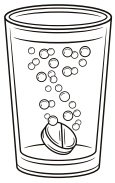

Force, Motion, & Energy

investigate & understand that the direction and size of force affects motion of an object



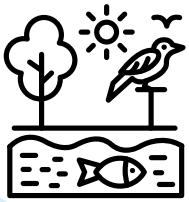

Matter

investigate & understand how materials interact with water

Earth Resources

investigate & understand that natural events & humans influence ecosystems




Earth & Space Systems

- investigate & understand that soil is important in ecosystems
- investigate and understand that there is a water cycle and water is important to life on Earth

Living Systems & Processes

- investigate & understand that adaptations allow organisms to satisfy life needs & respond to the environment
- investigate & understand that aquatic and terrestrial ecosystems support a diversity of organisms

(Virginia DOE, 2010)

Current State of Science

Matter

Lesson 1

Does Temperature Affect How Fast Something Dissolves?

Students investigated how warm and cold water influence the speed at which materials like salt or sugar dissolve. They conducted timed trials and recorded their data, discovering that higher temperatures tend to speed up the dissolving process. This lesson helped students connect real-life observations (like dissolving cocoa mix in hot milk) with scientific principles.

Lesson 2

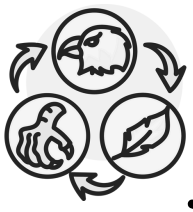
Do All Solids and Liquids Mix the Same Way with Water?

Students observed how different solids (like sugar, flour, and sand) and liquids (such as oil and vinegar) interact with water. They made predictions, mixed substances, and recorded whether they dissolved, floated, or separated. Through this activity, students began learning about solutions, mixtures, and solubility.

Looking Ahead

Our next unit will focus on adaptations (Standards 3.4a, 3.4b, and 3.4c). Students will explore how animals and plants adapt to survive in their environments. We'll investigate physical and behavioral adaptations, examine how specific traits help organisms meet life needs, and analyze how changes in ecosystems can impact survival.

–Ms. Medlen

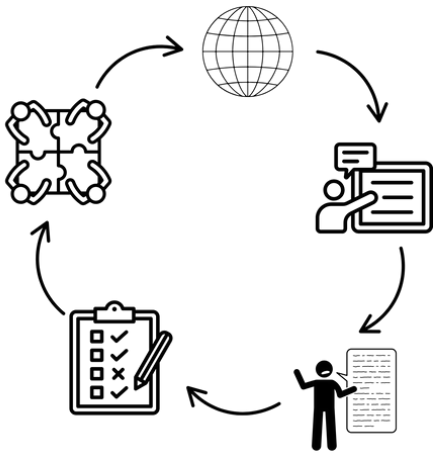


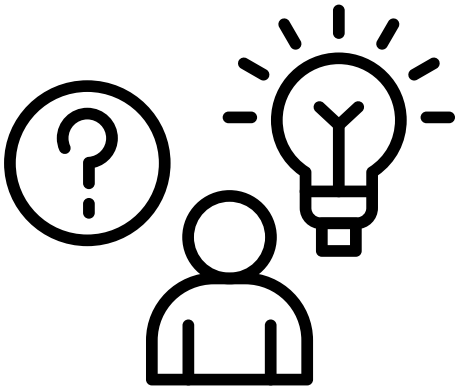
States of Learning

Just like matter moves through different states—solid, liquid, gas—our students move through phases of learning: engaging, exploring, explaining, elaborating, and evaluating their discoveries!

5E Lesson Plan

Students move through five learning phases—Engage, Explore, Explain, Elaborate, and Evaluate. These stages help deepen understanding through active learning and reflection (MCPS, 2001).



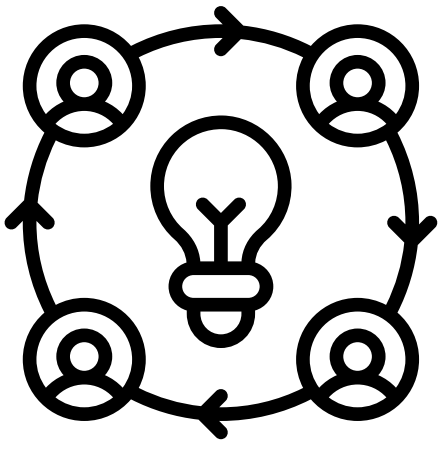


Inquiry Based

Students generate their own questions, conduct experiments, and analyze data. This student-centered approach promotes critical thinking and real-world application (NSTA, 2008).

Project Based

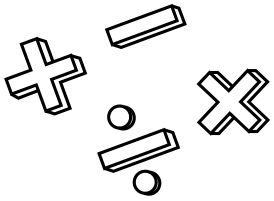
Students work on open-ended, real-world problems that relate to science content, fostering collaboration and problem-solving skills (Edutopia, 2017).



Mixtures of Learning Across the Subjects

Math

Students measure quantities, record data, and create bar graphs.

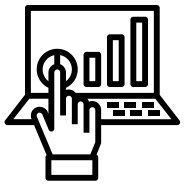


Health

We discuss how different materials (like salt and sugar) interact with our bodies and how to make healthy choices.

Technology

We use tablets to record observations and digital scales to measure mass.



Language Arts

Students write lab reports, summarize findings, and read nonfiction texts about matter.

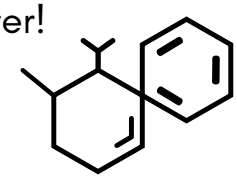
Books in our classroom library

- What's the Matter in Mr. Whisker's Room?
- Joe-Joe the Wizard Brews Up Solids, Liquids, and Gases
- Change It! Solids, liquids, gases, and You
- Libby Loves Science- Mix and Measure
- What's the Matter with the Three Little Pigs? The Fairy-Tale Physics of Matter
- Libby Loves Science- States of Matter

Science in the Home

Kitchen Chemistry

- Mix salt, sugar, flour, and baking soda in water. Which dissolve? Which don't? Try warm vs. cold water!



Solubility Hunt

- Check labels in your pantry—can your child guess if items will dissolve in water?

Science Talk

- Ask your child to explain what solubility means and how we test it

"The important thing is to never stop questioning"

-Albert Einstein

Fun Sites for at Home Experiments

- https://sciencebob.com/
- https://www.sciencebuddies.org/science-activities

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