

Letter to Home

Unit 1: Physical Properties of Matter

Dear Parent or Guardian,

Our class is learning how to classify the physical properties of matter and the variety of changes that can occur. Over the course of this chapter, students will have the opportunity to:

- **3.6A:** Measure, test, and record physical properties of matter, including temperature, mass, magnetism, and the ability to sink or float in water.
- **3.6B:** Describe and classify samples of matter as solids, liquids, and gases and demonstrate that solids have a definite shape and that liquids and gases take the shape of their container.
- **3.6C:** Predict, observe, and record changes in the state of matter caused by heating or cooling in a variety of substances such as ice becoming liquid water, condensation forming on the outside of glass, or liquid water being heated to the point of becoming water vapor (gas).
- **3.6D:** Demonstrate that materials can be combined based on their physical properties to create or modify objects such as building a tower or adding clay to sand to make a stronger brick and justify the selection of materials based on their physical properties

Thank you for your continued interest and involvement in your child's schoolwork. I hope this letter helps you stay informed about what your child is studying. If you are looking for a way to connect with your child about their school day, use the conversation starters. You can continue to explore this subject by completing the following family activity. As always, please feel free to contact me if you have any questions.

Sincerely,

Ms. Pinto

Conversation Starters

- How are the tallest towers or buildings built?
- How can you measure, test, or record matter?
- What is an example of a physical property of matter?
- Give me an example of a solid, a liquid, and a gas.
- How do heating and cooling change matter?
- How can materials be combined to change or make new objects?

Family Activity

For this family activity, you are going to help your child use the scientific process to discover the state of matter (solid, liquid, gas) of water. First, have your child make a prediction about what will happen if you heat ice cubes in a pan. Have them draw a picture to show what will happen. Then test what will happen together. Place several ice cubes in a saucepan and heat on medium high. You may wish to time how long it takes for the ice to melt and then how long it takes for the water to boil. Explain that steam is droplets of water in the air. As the steam disappears the water droplets change to water vapor, a gas.

If you want a bonus activity, create root beer floats. Discuss how root beer is a mixture of a liquid and a gas (carbon dioxide). When you add ice cream you also have a solid. Then you can enjoy the delicious floats!