This document is designed to inform you of the learning planned for your child's next unit of inquiry. In addition we offer you some optional ideas for supporting your child at home.

Y5 Unit Overview

HOW THE WORLD WORKS

In their third unit, the Year 5 students will inquire into the science strand *'Materials and Matter'*, through the central idea, **"Matter exists in different forms which can be changed and used for different purposes."**
The three lines of inquiry for the unit are:

- What defines matter (form)
- Changes matter can undergo (change)
- How we apply our understanding of matter to help us in our everyday life (connection)

They will explore the scientific idea that matter exists as solid, liquid or gas and can be described by its material properties. Through experimentation and investigation they will find out about chemical and physical changes that matter goes through. Through these investigations and experiments our students will become more knowledgeable about how the world works and be able to apply that knowledge to help them in their everyday life. The profile attributes of **inquirer** and **knowledgeable** are a focus in this unit as students will gain more knowledge and understanding about matter by using a scientific inquiry cycle. Students will further developed the thinking skills of **application** and **evaluation**. Throughout the unit they were will be applying their prior knowledge and new understandings to the everyday world as well as evaluating their hypotheses and theories through experimentation.

You may wish to support your child at home in the following ways:

Developing vocabulary:

Key vocabulary used in this unit will be:
solid, liquid, gas, state, matter, properties, chemical change, physical change, experiment, hypothesis, observation, scientist, variable, mix, diagram, measure, volume, capacity, mass, temperature, weight, density, freezing, melting, boiling, dissolve, condensation

Please consider using your Mother Tongue to develop your child's understanding of these words.

Conceptual questions:

This unit will be addressed through the lens of ***form***, ***change*** *and* ***connection****. To* help your child develop understanding of the concept of form talk to your child about the different states of matter (solid, liquid and gas) and how we could use scientific words to describe these states. To develop the concept of change ask your child what happens when matter changes from one state to another such as when water is being boiled or melted. Investigate changes that can be undone easily and changes that are more permanent. Finally, take time to recognise the various form of matter in our daily lives, talking about how knowing about these various forms helps us (for example, when cooking) Talk around these concepts in any context will support the work that we are doing in school.

Fun things to do together:

Take a trip to the science museum to see what forms of matter can be identified and explored. Spend some time doing simple science experiments with things you can find around your home. (google: simple science experiments, matter, changes) Look at the changes in states of matter by freezing water and then melting and boiling it. Have your child record his/her observations, noticing how each state can be described differently. Look around your home and talk about the things that have been created because of scientists understanding of matter such as a heater or an air conditioner.

Look for action:

ACTION is a key element of the Primary Years Programme. We are always looking to see how children take their learning and apply it independently. This can take many forms - from a discussion about the Unit of Inquiry at home initiated by your child, role-play or even a request to bring a book or artifact in to school because it relates to the work we have been doing in school. Now that you know what the unit is all about please keep your eyes open for evidence of action and let us know!

Any action that you tell us about will be kept as part of your child's records.

"Success for Every Child"