



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 our sixth Unit of Inquiry the Y5 students will be inquiring into the natural world and its laws and how humans use their understanding of scientific principles through the Central Idea **'Matter exists in different forms which can be changed and used for different purposes'**. We will investigate this through the concepts of Form (*'What is it like?'*), Change (*'How is it changing?'*) and Connection (*'How is connected to other?'*). Throughout the unit we will be developing our **research skills (as scientists)**, focussing on making detailed observations. As we begin to collect data from our experiments we will learn how to interpret, organise, and represent the data in different ways. Students will develop their **self-management skills** particularly focusing on how to stay safe when conducting experiments. Throughout the unit we will develop our ability to be **inquirers** focusing on the scientific inquiry process.

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

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**. Through the concept of form we hope our students will be able to describe matter and answer the question: What is the difference between the physical and chemical properties of matter? Through the concept of change we hope our students will be able to see how matter can change from one form to another and that some changes cannot be undone. The question we will be considering is: What is the difference between a chemical and physical change? We will be exploring the concept of connection as we look around to identify: How does knowing about the chemical and physical changes of matter help us in our everyday life?*

Fun things to do together:



This is another exciting unit for many of our learners as it is very hands on and allows them to get messy in the science lab. At home you might consider doing some "kitchen science" using everyday materials. Here are two great websites that you can use with your child as you explore "kitchen science" experiments.

<http://www.stevespanglerscience.com/> and <https://sciencebob.com/category/experiments/>

If any of you are scientists or if you just have a particular passion for science and are interested in sharing your expertise/passion please let your class teacher know.

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"





Alongside the key concepts, attitudes, learner profile attributes and action elements of the Primary Years Programme there is a body of knowledge that will be taught during the course of each unit. The main learning outcomes are outlined below for your reference. The children's understanding of each objective is assessed before each planned learning experience in order for us to pitch the work according to your child's ability and needs:

ENGLISH:

In speaking and listening for this unit we will be focusing on developing our scientific vocabulary and using this new vocabulary to explain why something happened or occurred during an experiment. In reading we will continue to develop our strategies to comprehend texts particularly focusing on asking questions, determining importance and identifying cause and effect in texts. Through out unit we will work on keeping science journals and learning how to record our observations efficiently. We will focus on a couple of text types including how to write up a science experiment (procedure) along with how to explain what happened in the experiment (explanation).

MATHS

During our unit we will also be applying our mathematical skills of estimating, comparing and measuring objects and materials. Students will be expected to use standard units of measurement such as mass, capacity, volume and temperature. Along with this measurement work we will also be exploring Pattern and Function (Algebra). Through this unit we will be analysing and identifying rules for patterns in order to make predictions about future terms. We will continue to explore patterns within the multiplication table and being able to identify factors and multiples of whole numbers. If your child is having difficulty with the multiplication table it would be beneficial for him/her to work on consolidating these facts at home.

SCIENCE and SOCIAL STUDIES

Matter has different states (i.e. solid, liquid, gas) and each state has distinct physical properties; some common materials such as water can be changed from one state to another by heating and cooling. (form/ change)

Natural and processed materials have a range of physical properties; these properties can influence their use. (connection)

Changes to materials can be reversible or irreversible (change)

Chemical change implies the formation of a new substance (change)

The difference between solids, liquids and gases can be explained in term for the movement of particles between neighbouring particles. (form)

PSPE

As we discuss chemical and physical changes in matter we will also take this opportunity to begin talking about the chemical and physical changes that occur as the students move into adolescence. We will be addressing the outcome: identify and discuss the changes that occur during puberty.

Our aim is to do this in a couple of sessions where boys and girls are separated in order for them to feel comfortable enough to ask the questions that they might be wondering about. We will update you in the weekly newsletter about the topics being addressed during these sessions.

Your child will learn best of all when school and home work as a team. If you have any questions at all please do not hesitate to contact us.

