“Success for Every Child”

Y2 Unit Overview - 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.

How the World Works

In their fourth unit, the Year 2 students will inquire into Science strand “**Forces and Energy**.” The students will be investigating the concepts of *forces* and *motion* through the central idea, “**Forces affect objects around us.**” Through this unit students will gain an understanding of the different types of forces in our world and how these forces affect objects by changing their speed, direction of motion, or shape. During the investigations students will discover how forces are part of our daily lives and that every time you move something or change its shape, a force is being applied. Students will investigate these science concepts through engaging experiments. They will be able to see how the scientific process works, to think like scientists, and find out how forces can be measured accurately. Throughout the inquiry students will develop their understanding of what it means to be **curious** about the world around them as well as the disposition of being an **inquirer**. These will be discussed as they find out about real scientists and how those scientists made their discoveries and conducted their experiments. Students will also gain the research skill, **planning** will be taught as students need to not only participate in experiments but also expected to plan and conduct their own.

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

KEY VOCABULARY used in this unit will be:
gravity, magnetic, push, pull, friction, velocity, shape, mass, motion, force, position, direction, pattern, function, mass, volume, capacity. 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 **connection, causation** and **reflection.** Over the next few weeks try to ask your child questions to develop the concept of connection:
(Connection: How is it connected to other things?)
How can you make an object move? How can we control a force to get an object to do what we want it to do? To develop the concept of causation
(Causation: Why is it like it is?)
Look at toys with moving parts. What force is acting upon them to make them move? What does the saying ‘what goes up, must come down’ mean? How is it linked to forces?
(Reflection: How do we know?)
To develop the concept of reflection discuss forces in your everyday life or through simple experiments at home. Ask your child the question: *How do we know?* to support what he/she know about forces.

FUN THINGS TO DO
Be a forces detective - have a walk around your neighbourhood and identify different examples of forces acting upon objects to make them move – e.g. child’s foot pushing against the ground to make their scooter move.
Make your own playdoh and see how many different ways you can change the shape.
Investigate the different ways you can make a toy car move without pushing it with your finger.
Take a trip to the science museum and explore the ‘Motion’ section.

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.