Science Assessment Grid

	Autumn		Spring		Summer	
	1.1.	1.2.	2.1.	2.2.	3.1.	3.2.
YR	**Parts of the body** **Similarities and differences**	**Colour, light/ dark**	**Animals & Habitats - contrast**	**Materials** **Plants**	**Habitats** **Plants**	**Mini beasts & their habitats** **Floating and sinking** **The seaside**
	The Natural World • Explore the natural world around them, making observations and drawing pictures of animals and plants. • Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class. • Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.					
Y1		**Rats, Toys & Kings** Describe the simple physical properties of a variety of everyday materials. Group together everyday materials based on their physical properties.	**Wonderful Me** Label basic human body parts. Name all of the senses. **TAPS Assessment - Modelling the body** • Using their observations and ideas to suggest answers to questions		**Powerful Plants** Know the difference between deciduous and evergreen trees. Name the basic structure of plants and trees. **TAPS Assessment – Modelling Plant Structure** • Observe and identify	**The Carnival of the Animals** Identify and name common animals including fish, amphibians, reptiles, birds and mammals. Name animals that are carnivores, herbivores and omnivores. **TAPS Assessment- Animal Classification** • Identifying and classifying • Describe and compare the structure of a variety of animals.
Y2	**Deep in the woods** Explain the life cycle of a hedgehog. Compare the life cycle of a human to the life cycle of a hedgehog and understand that offspring grow into adults.	**Incredible You** Explain why it is important to exercise, eat healthy foods, drink water and be hygienic. Know why eating the right amounts of different types of food is important.	**I Spy With My Little Eye** Explain why different materials are suitable for different things because of their properties. Explain which material is most suitable to make a bucket and why. **TAPs Assessment– Comparative test** • What material would you use to make a boat to carry people crossing the Thames to flee the Great Fire of London?		**The Secret Garden** Explain how seeds and bulbs grow into mature plants Know plants need water, light and a suitable temperature to grow and stay healthy. **TAPs Assessment** • Describe what they have found out and use their results to make comparisons: children to order large pictures of their beans, label the key vocabulary and present it to others in their Science 3s.	**Wild & Wonderful** Know the difference between things that are living, dead, and things that have never been alive. Name a variety of plants and animals in their habitats, including microhabitats. Create and understand a simple food chain.
Y3		**Bones & Other Bits** Understand the importance of nutrition Know key parts of the human skeleton Know how muscles help us move. **TAPS** • Fingerprint classifying- recognise patterns from my observation and investigations	**Extreme Earth** Describe and name different types of rocks. Explain how fossils are formed Comparative test- soil investigation testing permeability.	**Magnificent Magnets (Science Week)** Know which materials are attracted to a magnet. Predict whether two magnets will attract or repel one another. Comparative test- car ramp which surface is best to stop slipping	**I Can Grow** Describe the functions of different parts of flowering plants. Explain what plants need to live. Explain the life cycle of flowering plants. **TAPS** • Plant slow reveal- making systematic and careful observations	

		Shadowy Showpiece To understand light is reflected so we can see objects To recognise objects can be transparent, translucent or opaque. To explain how light can be blocked **TAPS -** Investigating shadow size- making systematic and careful observations and taking accurate measurements		**TAPS - Magnetic Maze** Analytical thinking Contributes to the design processes and uses components to make models		
Y4			**Polluted Planet** Understand and describe the water cycle Understand how states of matter change •	**Chew, Poo & You** Name the different types of teeth and explain their role in digestion Know how food travels through the body Understand what a food chain is and how it works. **TAPS- The Homan Digestion Explanation.** I can engage with scientific and technological evidence. **Powerful Problems** Construct a simple circuit and name its components. Understand whether a circuit is complete or incomplete using a switch. Recognise materials that are conductors or insulators and explain their uses. **TAPS** • Conductor or Insulator • Use straightforward scientific evidence to answer questions or to support their findings.	**What a Wonderful World** Group and identify animals using classification keys. Explain how environments can change and that this can sometimes pose dangers to living things.	**Sound** Recognise that vibrations from sounds travel through a medium to the ear Find patterns between the volume of a sound and the strength of the vibrations that produced it. **TAPS** • String telephone conclusions • Use results to draw simple conclusions.
Y5	**Incredible Inventions** Know what materials are suitable for what purposes. Describe and justify material choices for their inventions. **TAPS** • Insulation layers • Compare everyday materials on basis of their thermal conductivity	**Fantastic Beasts** Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird. Describe the key difference between the life process of reproduction in plants and animals.	**Amazing Egyptians** Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object. Identify the effects of air resistance, water resistance and friction that act between moving surfaces. Recognise that some mechanisms including levers, pulleys and gears allow a smaller force to have a greater effect.	**Vicious Vikings** Explain how gravity has an impact on objects on Earth. Explain the impact air resistance; water resistance and friction have on objects. **TAPS** • Identify the effects of water resistance	**Are We Alone?** Describe the solar system including the eight plants and the Sun Describe the movement of the moon relative to the Earth	**Human Highways (Moved from Y6)** Name the main parts of the human circulatory system Describe the functions of the heart, blood vessels and blood. Recognise the impact of diet, exercise, drugs and lifestyle on the human body. Describe how nutrients and water are transported within animals and humans

			Explain how gravity has an impact on objects on Earth. Explain the impact air resistance; water resistance and friction have on objects.	Use test results to make predictions to set up further comparative and fair tests		??? **TAPs** • Reaction catches • Ask questions and develop a line of enquiry To recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function
Y6		Fight or **flight** Explain that we see things because light travels from light sources to objects then into our eyes. Know that light travels in straight lines which explains why shadows have the same shape as the objects that cast them		**Darwin's Discoveries** To give reasons for classifying plants and animals into specific categories based on their characteristics. To explain how living things change and adapt over time and that this may lead to evolution.		**Trails & Treasure!** To recognise symbols in a simple circuit diagram To explain how the loudness of a buzzer is affected by the number and voltage of cells in a circuit

Working scientifically recorded in blue

Primary Science Teaching Trust

At Bosham we use the Teacher Assessment in Primary Science (TAPS) resources from the Primary Science Trust to assess pupils. It is based at Bath Spa University and funded by the Primary Science Teaching Trust (PSTT). TAPS aims to develop support for a valid, reliable and manageable system of primary school science assessment which will have a positive impact on children's learning.

Asking questions
Asking questions that can be answered using a scientific enquiry.

Making predictions
Using prior knowledge to suggest what will happen in an enquiry.

Setting up tests
Deciding on the method and equipment to use to carry out an enquiry.

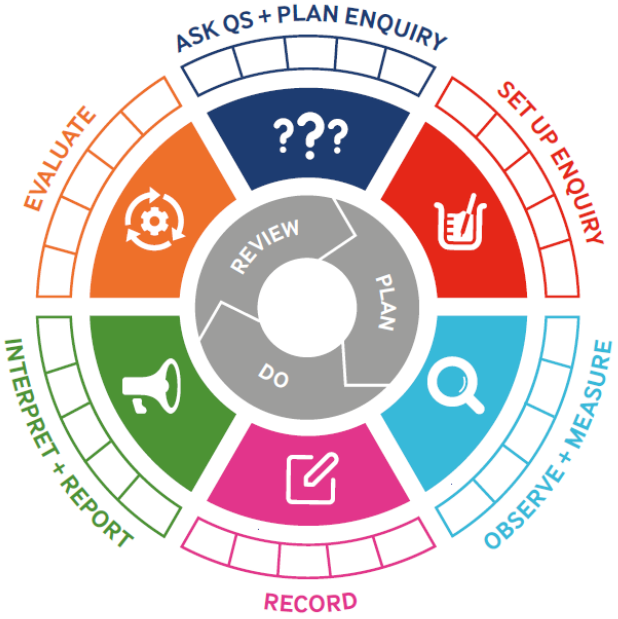
Observing and measuring
Using senses and measuring equipment to make observations about the enquiry.

Recording data
Using tables, drawings and other means to note observations and measurements.

Interpreting and communicating results
Using information from the data to say what you found out.

Evaluating
Reflecting on the success of the enquiry approach and identifying further questions for enquiry.

TAPS Working Scientifically Cycle



BATH SPA UNIVERSITY

why & how? PRIMARY SCIENCE TEACHING TRUST