Science Year 5 SOL

Yr5	1.1	WDIKA— Mixtures , Solutions, Dissolving Melting	Understand what are mixtures Different types of mixtures Heterogeneous and homogeneous	Know the difference between dissolving and mixing	Know few methods to separate different types of mixtures	plan a fair test to investigate which types of sugar dissolves the fastest.	Investigate processes to separate different types of mixtures	Assessment	Understand differences between mixing and dissolving Recognise processes of separating mixtures Describe how to recover a substance from a solution	heterogeneous matter mixture dissolve solution solute
Skills- Sc Enquiry Recognise and control variables where necessary Identify specific clear questions that will help to sort without ambiguity						**Knowledge** Be able to understand how different mixtures can be separated.				
	1.2	WDIKA Materials and their properties	Compare and group everyday materials based on their properties(hardness, solubility, transparency, thermal and electrical conductivity and response to magnets	Demonstrate reversible changes	Differentiate between irreversible and reversible changes with examples	Investigate reversible and irreversible changes	Investigate how a container of salt water change over time	Assessment	Materials can be classified on basis of their properties Explain that some changes result in formation of new materials and this kind of change is irreversible Demonstrate dissolving, mixing and change of state is reversible changes	Ir/reversible changes insulator immiscible
Skills -Sc Enquiry Be able to compare not only based on physical properties but also on knowledge gained through previous enquiry Be able to answer their questions, describing the change over time									**Knowledge** Be able to differentiate between reversible and non-reversible change	

Yr5	2.1	WDIKA What does the solar system consists of	Know the order of planets in the solar system and few features of planets with comparison to the earth.	Understand we have day and night and why we have seasons	Observe, identify and record the phases of moon	Know that why the moon has phases and effect of it on earth		Assessment	Understand the difference between star, satellite and planet. Explain why we have day and night and seasons What affect does moon have on Earth	pinnacle rotation geocentric heliocentric axis revolution planet
	Skills -Sc Enquiry Ask a range of questions recognising that some can be answered through research and others may not Present what they learnt in a range of ways e.g. different graphic organisers					**Knowledge** Be able to explain relationship between the moon and Earth				
	2.2	WDIKA Why objects move and come to rest	Kinds of Forces, unit of force and measuring force	Balanced and unbalanced forces	Disadvantages and advantages of frictional force	Investigate how to overcome air resistance to either increase speed or reduce speed	Explore levers, gears and pulleys	Assessment	Understand unbalanced forces result in motion of a body. Understand how we can reduce or increase Air resistance to control motion. Understand that simple machines can reduce the force to do work	hefty unstable Newton gravity buoyancy friction air resistance unbalanced forces simple machine
Skills -Sc Enquiry Ask a range of questions and identify the type of enquiry that will help to answer the questions. Ask further questions based on results. Use test results to make predictions for further investigations						**Knowledge** Be able to understand how simple machines work Be able to identify different forces				

Y5	3.1 /3. 2	WDIKA Reproduction in plants and animals	Describe the life process of reproduction in some plants and animals.	Distinguish between life cycle of a butterfly, bird and mammals	Know the process of reproduction in plants How do plants spread their seeds(Recap from year3)	Differentiate between sexual and asexual reproduction in plants	Observe observe changes in an animal over a period of time (for example, by hatching and rearing chicks or a butterfly or a frog)	Assessment	Different types of organisms have different lifecycles Understand sexual or asexual reproduction	propagation breeding reproduction asexual metamorphosis fertilization cell
Skills -Sc Enquiry Be able to talk about their degree of trust in the sources they used Provide oral or written explanations for their findings						**Knowledge** Be able to understand reproduction methods in plants and animals				