Leintwardine Endowed CE Primary School Learning Journey Itinerary

'Letting Our Light Shine'

SUBJECT : Science	YEAR : B	TERM : Autumn 1	YEAR GROUPS : 5/6

Key Question: What materials are changeable and which are not?

Previous Knowledge – We would expect children to already be able to:
Identify a materials state, solid, liquid of gas, and discuss their properties from this. They will understand that some materials states will changed based on heated or cooled.

END OF UNIT OBJECTIVES

Some children will not yet have met what is expected and will show that they are **emerging** because they can:	Most children will show that they have reached the **expected** level because they can:	Some children will have gone beyond the expected level and will show that they are **exceeding** because they can:
…identify some materials. …describe some materials' properties. …identify some thermal and electrical conductors and insulators. …with support, identify some materials that are soluble or insoluble in water. …with scaffolding, follow instructions to separate mixtures. …with support, identify irreversible changes. …make simple predictions about what will happen in an investigation. …make observations and then simply record their findings.	…follow instructions to test a material's properties. …explain the uses of thermal and electrical conductors and insulators. …order materials according to their electrical conductivity. …explain and investigate dissolving. …explain the processes used to separate mixtures. …explain irreversible changes. …identify the variables in an investigation and with some prompts, identify dependent, independent and controlled variables. …make observations and conclusions. …be able to answer questions based on their learning.	…devise their own ways to test a material's properties. …explain the uses of a material according to its properties. …explain why materials have dissolved in certain conditions. …select and explain the most suitable processes to separate different mixtures. …identify the new materials made in irreversible changes. …identify dependent, independent and controlled variables. …set up reliable and accurate investigations. …make and explain predictions. …make and record accurate observations. …use scientific language to explain their findings. …use their results to make generalisations and further predictions. …be able to ask and answer questions based on their learning using scientific language.

ASSESSMENT OPPORTUNITIES
Children's work will be monitored for understanding at all times. Children will be encouraged to ask questions at all times to enable them to clarify their understanding and avoid misconceptions.

ENRICHMENT OPPORTUNITIES **Helping children to remember more** Children will complete the experiments themselves to will see the changes first hand, making it more memorable.	**SUBJECT SPECIFIC VOCABULARY** States of matter, materials, natural, human made, magnetic, reflective, absorbent, permeable, translucent, flexible, hard, flammable, insulating, transparent, solids, liquids, gases, particles, melting, freezing, evaporating, condensing, conductivity (electrical and thermal), flexibility, hardness, insulators, magnetism, soluble, insoluble, solubility, transparency, sieving, filtering, reversible change, irreversible change, reactants, mixing, dissolving.	**CROSS-CURRICULAR LINKS** **Links that we can make to help children make sense of what we want them to know and be able to do.** Maths – presenting data English – write up of experiments