



St. Francis Xavier's RC Primary School

Science Unit Guidance and Formative Assessment

Year Group:	4 Autumn 2	Subject:	Science
Unit:	States of Matter	Prerequisite Learning and Curriculum Links	<p>EYFS ELG 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; understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.</p> <p>Materials: Experiment with changing materials</p> <p>Y1: Materials- Describe physical properties of materials</p> <p>Y2: Materials- can be altered or changed</p> <p>Curriculum Links in Year 4</p> <p>Geography: The Water Cycle, Muis – The water Cycle Rap. DT (Cooking and Nutrition)– design a new chocolate bar using change of state and temperature. Maths – temperature</p>

ROCKS (Remembering Our Curriculum Knowledge and Skills)	
Materials can be grouped together according to whether they are solids, liquids or gasses	
Changes of state occur during the cooling and heating of some materials and can be measured using a thermometer in degrees Celsius	
Water can be in different states of a liquid, ice or water vapour	
Evaporation and condensation form major parts of the water cycle	
Progressive Journey:	Skills:
Investigate states of matter with water Classify materials based on their state of matter, such as sand and flour being a solid despite being able to be poured Conduct experiment based on the question, 'Does air have weight?' Observe what happens when materials are heated and cooled Identify the evaporation process, addressing the misconception that water 'disappears' Understand the process of The Water Cycle and how this correlates to changes of state	Compare, group and classify materials based on their properties Observe closely, recording findings using labelled diagrams Ask questions and find out the answers using scientific enquiry Measuring using a thermometer or data logger Identify similarities or change over time
Key Vocabulary	
State of matter, solid, liquid gas, freeze, melt, condensation, evaporation, heat, cooled, water cycle	