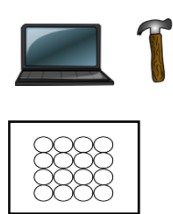
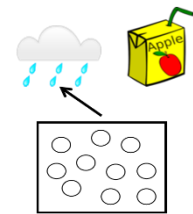


The Marist RC Primary School		Knowledge Organiser		
Year 4, Science Autumn		Properties and Changes of Material		
Builds on and leads to ...		Enquiry/skills		
Build on from Year 2... Identify what materials are made of and their suitability for everyday uses Understand some objects can be changed by squashing, bending Leads to Year 5 ... Compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), magnetism. To be able to separate liquids and solids using filtering, sieving and evaporating. Explaining what reversible and irreversible reactions are.		• Setting up simple practical enquiries, comparative and fair tests • Making systematic and careful observations using a range of equipment including thermometers • Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions • Using straightforward scientific evidence to answer questions or to support their findings.		
What will I know by the end of the unit?	Vocabulary			
• Be able to identify solids, liquids and gases and the properties of each. • Recognise that some materials change state when they are heated or cooled. • Understand that the temperature at which change occurs varies between different materials (e.g. water, chocolate) • Know the part that evaporation and condensation play in the water cycle.	Property	A property is a quality of something like hardness, flexibility or absorbency. Materials have properties that help them serve specific purposes.		
	Solid	Solids keep their shape unless pushed or pulled. Form a pile when poured.		
	Liquid	Liquids change their shape depending on the container they are in. Flow into a puddle.		
	Gas	Gases do not have a fixed shape and spread out to fill up whatever container they are in.		
	Melting	The process of heating to change a solid into a liquid.		
	Freezing	The process of cooling to change a liquid into a solid.		
	Evaporation	The process of heating to change a liquid to a gas.		
	Condensing	The process of cooling to change a gas to a liquid.		
		Assessment Task End of unit knowledge test. Scientific Working assessment planning an investigation observing the temperature at which ice melts.		
Diagrams / Maps / Images				
Solid 	Liquid 	Gas 