LOOKING at state   Year 4   Spring 1					
What I already know:	What I will learn	Key Vocabulary			
How to use a material's properties to describe it.	<sup>1</sup> To compare and group materials together, according to whether they are solids,	solid	A substance that stays the same shape whether it is in		
That properties of different	liquids or gases.		a container or not.		
material cause them to behave differently.	<sup>2</sup> To observe that some materials change state when they are heated or cooled,	liquid	A substance that can flow and take on the shape of a		
Heating and cooling causes	and measure or research the temperature		container.		
some materials to change.	at which this happens in degrees Celsius (°C).	gas	A substance that has no fixed shape, like oxygen.		
States of matter solid liquid gas	<sup>3</sup> To identify the part played by evaporation and condensation in the water cycle and	state change	When a material changes from one material type to another.		
	associate the rate of evaporation with	melting	The temperature at which a solid melts		

## Working Scientifically Skills:

**Set up** simple practical enquiries, comparative and fair tests.

Make systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers.

**Report** on findings from enquiries, including oral and written explanations, presentations of results and conclusion.

Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.

gas	A substance that has no fixed shape, like oxygen.
state change	When a material changes from one material type to another.
melting point	The temperature at which a solid melts.
boiling point	The temperature at which a liquid boils.
evaporation	The process of a liquid heating and changing into a gas.
condensation	The process of a gas cooling and changing into a liquid.
temperature	How hot or cold something is. Measured in degrees Celsius (°C).
	Water on Earth is constantly

	Celsius (°C).
water cycle	Water on Earth is constantly moving. It is recycled over
	and over again. This is called the Water Cycle.

## **Scientists/Inventors:**

hinid fixed shape

(Solid)

fixed volume

Melting

Freezing

not rigid

no fixed shape

fixed volume

Water

(liquid)

1

2

3

Anders	
Celsius	
(1701-1744)	

Astronomer who invented the degrees Celsius temperature scale.

Condensing

not rigid

no fixed shape

no fixed volume

Water vapour

(gas)