

Leintwardine Endowed CE Primary School Learning Journey Itinerary

'Letting Our Light Shine'

SUBJECT : Science

YEAR : A

TERM : Summer 1

YEAR GROUPS : 3/4

Key Question: Gas, Liquid or Solid?

Previous Knowledge – We would expect children to already be able to:

ask simple questions and recognising that they can be answered in different ways.

observe closely, using simple equipment.

perform simple tests.

identify and classify.

use their observations and ideas to suggest answers to questions.

gather and record data to help in answering questions.

describe the simple physical properties of a variety of everyday materials.

compare and group together a variety of everyday materials on the basis of their simple physical properties.

END OF UNIT OBJECTIVES

Some children will not yet have met what is expected and will show that they are emerging because they can:

- Sort materials into solids, liquids and gases
- Explain that heating causes melting, and cooling causes freezing
- Identify the melting and freezing point of water
- Describe evaporation and condensation using practical examples
- Describe the effect of temperature on evaporation referring to their investigation
- Identify the stages of the water cycle
- Predict what will happen in an investigation
- Make observations

Most children will show that they have reached the expected level because they can:

- Sort materials into solids, liquids and gases
- Explain that heating causes melting, and cooling causes freezing
- Identify the melting and freezing point of water
- Describe evaporation and condensation using practical examples
- Describe the effect of temperature on evaporation referring to their investigation
- Identify the stages of the water cycle
- Predict what will happen in an investigation
- Make observations
- Describe the properties of solids, liquids and gases.
- Explain that melting and freezing are opposite processes that change the state of a material.
- Identify the melting and freezing point of several different materials.
- Explain that heating causes evaporation and cooling causes condensation.
- Explain that evaporation and condensation are opposite processes that change the state of a material.
- Explain that the higher the temperature, the quicker water evaporates.
- Explain what happens to water at the different stages of the water cycle.
- Make observations and conclusions.
- Be able to answer questions based on their learning.

Some children will have gone beyond the expected level and will show that they are exceeding because they can:

- Sort materials into solids, liquids and gases and describe their properties
- Explain that heating causes melting, and cooling causes freezing
- Identify the melting and freezing point of water
- Describe evaporation and condensation using practical examples
- Describe the effect of temperature on evaporation referring to their investigation
- Identify the stages of the water cycle
- Predict what will happen in an investigation
- Explain that melting and freezing are opposite processes that change the state of a material.
- Identify the melting and freezing point of several different materials.
- Explain that heating causes evaporation and cooling causes condensation.
- Explain that evaporation and condensation are opposite processes that change the state of a material.
- Explain the behaviour of the particles in solids, liquids and gases.
- Explain why a material's melting and freezing point is the same temperature.
- Explain how heating and cooling can cause materials to evaporate and condense.
- Explain why a higher temperature will speed up evaporation.
- Use the water cycle to explain why the water we have on Earth today is the same water that has been here for millions of years.
- Set up reliable and accurate investigations.
- Make and explain predictions.
- Make and record accurate observations.
- Use scientific language to explain their findings.
- Be able to ask and answer questions based on their learning using scientific language.

ASSESSMENT OPPORTUNITIES

Kahoot quiz, questioning in lessons, work completed in book

ENRICHMENT OPPORTUNITIES

Helping children to remember more
Children model solids, liquids and gases.
Observing reversible reactions with chocolate and ice.

SUBJECT SPECIFIC VOCABULARY

solid, liquid, gas, particles, state, material, properties, carbon dioxide, matter, weight, mass, melt, heat, freeze, cool, thermometer, temperature, condense, evaporate, process, water, ice, water vapour, dry, energy, condensation, precipitation, collection, clouds, rain, sleet, hail, snow

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.
D&T cooking activities