



Knowledge and Skills Mind Map (Science) Year 1 Spring Term

Knowledge - 
Skill - 



1. January/February (weather dependent) Can I observe closely the weather associated with the seasons in the context of Winter?

- **Prior Learning (Autumn Term):** looked at the features of the weather in Autumn
- **Vocab:** weather, seasons, Winter, temperature,
- Know when each of the four seasons occur
- Know the features of Winter (e.g. temperature/weather) and the changes that occur (e.g. length of day/colder/hibernation/weather)
- **Observe closely using simple equipment (e.g. weather recording—create a weather forecast)**

2. Can I ask scientific questions about everyday materials?

- **Prior Learning (last lesson):** observed the weather in Winter
- **Vocab:** material, object, question
- Know that everyday objects are made from different materials (e.g. wood, plastic, metal).
- Know that scientists ask questions to help them find out more about materials.
- Know that questions can be asked about how materials look, feel, or are used.(e.g. why is the table made of wood? How is metal made?)
- **Ask simple questions and recognise that they can be answered in different**

• **Everyday Materials**
• **Seasonal Changes: Winter and Spring**

3. Can I identify and classify objects by the materials they are made from?

- **Prior Learning (last lesson):** asked scientific questions about everyday materials
- **Vocab:** material, classify
- Know that many objects in the classroom are made from different materials such as wood, plastic, metal, glass and fabric.
- Know that classroom objects can be sorted and grouped by the material they are made from (for example, plastic chairs or wooden tables).
- Know that classifying means putting classroom objects into groups based on the material they are made from.
- **Identify and Classify**

4. Can I observe and describe the properties of everyday materials?

- **Prior Learning (last lesson):** classified objects by the materials they are made from
- **Vocab:** observe, describe,
- Know that different materials have different properties and make it useful for different purposes:
 - plastic is waterproof so it can be used to coat fabric for clothing but can also be used for outdoor play equipment
 - metal is strong so it can be used for objects like chair legs, fences and bridges
 - fabric is soft so it can be used for clothes, cushions and carpets
- Know that some materials are hard or soft, smooth or rough, or flexible or rigid (e.g. rubber is flexible, wood is hard).
- Know that properties can be observed by looking at and carefully touching materials.
- **Observing closely, using simple equipment**

8. March/April (weather dependent): Can I observe closely the weather associated with the seasons in the context of the Spring?

- **Prior Learning (lesson 1):** observed weather in Winter
- **Vocab:** weather, seasons, Spring, temperature
- Know when each of the four seasons occur
- Know the features of Spring (e.g. temperature/weather) and the changes that occur (e.g. length of day/warmer/flowers/animals)
- **Observe closely using simple equipment (e.g. create a weather forecast—spring nature walk—nature reserve)**

7 Can I use gather and record information to show how materials are similar or different?

- **Prior Learning (last lesson):** compared materials and suggested which is best
 - **Vocab:** gather, record, table
 - Know that information about materials can be gathered by observing their properties, such as hard, soft, waterproof or flexible.
 - Know that recording means writing down, drawing, or using simple tables to show what we find out about materials.
 - Know that recorded information can help us see how materials are similar or different, for example which materials are waterproof or which are soft.
- **Gather and record data to help answer questions**

6. Can I use observations to compare materials and suggest which is most suitable for a purpose?

- **Prior Learning (last lesson):** tested the properties of everyday materials
- **Vocab:** compare, suitable, property
- Know that materials can be compared by looking at their properties, such as waterproof, strong, soft or flexible.
- Know that comparing means noticing how materials are the same or different based on what we observe.
- Know that observations can help us suggest which material is most suitable for a job, for example plastic for a raincoat or fabric for clothing. Wood or plastic is best for certain toys
- **Use observations and ideas to suggest answers to questions**

5. Can I perform simple tests to find the properties of everyday materials?

- **Prior Learning (last lesson):** observed and described properties of everyday materials
- **Vocab:** test, properties, waterproof, flexible, absorbent
- Know that simple tests can be used to find out the properties of materials, such as bending, twisting or pouring water on them.
- Know testing materials helps us find out if they are strong, flexible, waterproof or absorbent.
- Know that a simple test could include bending a material to see if it changes shape, or pouring a small amount of water onto a material to see if it soaks in or stays on the surface.
- Know that tests should be done carefully so we can clearly see what happens to each material.
- **Performing simple tests**