



Knowledge and Skills Mind Map (Science) - Year 1 Summer Term

Knowledge - 
Skill - 

1. Can I **observe, gather and record** information about plant growth over time? (part 1. See lesson 7)

- **Prior Learning (last term):** everyday materials and their purpose
- **Vocab:** observe, gather, record information
- Know that plants change and grow over time, for example a seed growing into a seedling and then a flowering plant such as a sunflower.
- Recap that observing means looking carefully at plants over time to notice changes, such as new leaves growing, stems getting taller, or flowers opening.
- Know that information can be recorded using drawings, labels or simple charts, for example drawing a plant each week or marking its height to show how it grows
- (task: plant cress seeds and measure at start of each science lesson this term). See lesson 7
- **Gather and record data to help answer questions**

2. Can I **identify and name** a variety of common wild and garden plants?

- **Prior Learning (last term):** everyday materials and their purpose
- **Vocab:** plant, wild, garden
- Know that wild plants grow on their own without being planted, for example daisies, dandelions and buttercups growing in grass or fields.
- Know that garden plants are grown by people, for example roses, sunflowers and tomatoes planted in gardens or pots.
- Know that different plants have common names that can be used to identify them, such as oak, grass, tulip or nettles, and these names help us talk about plants clearly.
- **Identify and Classify**

3. Can I **identify and name** deciduous and evergreen trees in the local environment?

- **Prior Learning (last lesson):** identified and named common wild and garden plants
- **Vocab:** tree, deciduous, evergreen
- Know that deciduous trees lose their leaves in autumn and grow new leaves in spring, for example oak, maple and birch trees.
- Know that evergreen trees keep their leaves (or needles) all year round, for example pine, fir and holly trees.
- Know that trees in the local environment, such as in the school grounds, park or street, can be identified as deciduous or evergreen by looking at their leaves or needles and observing them across the seasons.
- **Observe closely, using simple equipment**

4. Can I **identify and describe** the basic structure of a common flowering plant?

- **Prior Learning (last lesson):** identified and named deciduous/evergreen trees
- **Vocab:** roots, stems, leaves, flowers
- Know that a common flowering plant is made up of basic parts including roots, stem, leaves and flowers (for example, a daisy or sunflower).
- Know that roots grow underground to hold the plant in place and take in water, while the stem holds the plant upright and supports the leaves and flowers.
- Know that leaves and flowers grow above the ground, with leaves helping the plant grow and flowers often becoming seeds, which can grow into new plants.
- **Observe closely, using simple equipment**

• Plants
• Seasonal Changes: Summer

8. June/July (weather dependent) Can I **observe closely** the weather associated with the seasons in the context of Summer?

- **Prior Learning (Spring Term):** looked at the features of the weather in Winter and Spring
- **Vocab:** weather, seasons, Summer, temperature,
- Know when each of the four seasons occur
- Know the features of Summer (e.g. temperature/weather) and the changes that occur (e.g. length of day/warmer)
- Know that it is not safe to look directly at the sun, even when wearing dark glasses
- **Observe closely using simple equipment (e.g. weather recording—create a weather forecast)**

7. Can I **observe, gather and record** information about plant growth over time? (part 2. See lesson 1)

- **Prior Learning (lesson 1):** planted a cress seed and have watched it grow
- **Vocab:** observe, gather, record information
- Know that information can be recorded using drawings, labels or simple charts, for example drawing a plant each week or marking its height to show how it grows
- (note for teachers: this lesson's task is to complete the table of measurements over time)
- **Gather and record data to help answer questions**

6. Can I **compare** plants?

- **Prior Learning (last lesson):** function of different parts of a plant
- **Vocab:** compare, similarity, difference,
- Know that comparing means looking at how plants are the same and different, for example both a daisy and a sunflower have stems and leaves, but their flowers are different shapes and sizes.
- Know that plants can be similar or different in size, colour, leaf shape and type of flower, for example a tulip has broad leaves, while grass has long, thin leaves.
- Know that careful observation helps us describe similarities and differences, such as noticing that some plants have bright flowers while others, like ferns, do not have flowers at all.
- **Identify and Classify**

5. Can I **describe** the function of different parts of a plant?

- **Prior Learning (last lesson):** identified and described the structure of common flowering plants
- **Vocab:** function, roots, leaves, stem, seeds
- Know that roots hold the plant in the ground and take in water from the soil, for example the roots of a carrot or dandelion.
- Know that the stem supports the plant and carries water to the leaves and flowers, such as the long stem of a sunflower.
- Know that leaves help the plant grow by making food using sunlight, and that flowers can turn into seeds which grow into new plants.
- **Using observations and ideas to suggest answers to questions**