Medium Term Plan: Supporting Implementation of LTP/Progression Grid

Subject: Science Year: KS1 year B

NC/PoS:

- observe and describe how seeds and bulbs grow into mature plants
- find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.

Prior Learning (what pupils already know and can do)

Know flowering plants can consist of leaves, flowers (blossom), petals, roots, bulb or seed, trunk, branches, stem. Some plants are grown by human intervention (garden plants) and some without human intervention (wild plant) How plants change through the seasons.

End Goals (what pupils MUST know and remember)

To know seeds and bulbs have a store of food inside them.

To know plants need light, water, air, nutrients and space

To know that seeds and bulbs do not need light to germinate but need warmth.

To know the process to grow into mature plants includes growing roots, shoot appears through soil, plant takes nutrients from the soil and continues to grow

To know types of seed: sunflower apple, tomato, pea

To know types of bulb: daffodil, tulip, bluebells, onions, garlic

To know that plants need water, light, warmth and space to stay healthy

Key Vocabulary: seeds (sunflower apple, tomato, pea) bulbs (daffodil, tulip, bluebells, onions, garlic) store, size, colour shape, sunflower, narcissi, snowdrop, germinate, light, weaker, temperature, growth, healthy

Session 1: review prior learning

Recap: structure of plants. Name three wild and garden plants

https://www.youtube.com/watch?v=tkFPyue5X3Q

David Attenborough - plant growing

Session 2:

Lo: to observe different types of seeds and bulbs

Give the children a variety of seeds and bulbs to observe and compare size, colour, shape etc.

Children need to know that they all store food.

Vocabulary: seeds (sunflower apple, tomato, pea) bulbs (daffodil, tulip, bluebells, onions, garlic) store, size, colour shape,

Session 3:

Over next few weeks set off 3 different experiments

https://www.voutube.com/watch?v=bsVtm4L4LMY up to 5.16

Plant some bulbs and seeds in trough, peas grow quickly, take tomato seeds out of tomato, sunflower, narcissi and snowdrop. Each table or group could have different plants to grow. Children record their observations and results when measuring the plant

Vocabulary: peas, tomato, sunflower, narcissi, snowdrop, germinate

Session 4:

LO: to predict the growth of a seed

To observe how plants needs light for healthy growth. Plant seeds, put one pot in a cupboard. It will still grow but be long and straggly trying to reach for the light. Highlights plants need light for growth.

Vocabulary: light, weaker

Session 5:

To observe how cold affects a plant

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You can either plant seeds or use two established plants but put one in the classroom and the other in the fridge. What happens to the plant?

Children evaluate what has happened, giving reasons.

Vocabulary: temperature, growth

Session 6:

Lo: To Describe how to look after a plant and keep it healthy

Vocabulary: healthy

Link to career scientist:

Landscaper https://www.youtube.com/watch?v=ZNFAcNsB5Yo
Tree surgeon https://www.youtube.com/watch?v=IffIjGnwzJQ

Plant photographer

Scientists who have helped develop understanding in this field: