PLANTS - YEAR 2: PROGRESSION MAP

National Curriculum Objectives

- 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

Lesson Titles:

1. **What Are Seeds?**
2. **How Do Seeds Grow?**
3. **What Are Bulbs?**
4. **How Do Bulbs Grow?**
5. **What Do Seeds and Bulbs Need to Grow?**
6. **Where Do New Plants Come From?**

Common misconceptions:

- Plants only grow in light
- Seeds are the same as bulbs
- Plants do not need air
- Bulbs are dead or just roots
- All plants grow at the same speed
- Bulbs are the same as seeds but bigger
- Plants only grow above ground

Hinterland:

- Visiting a garden or allotment to see bulbs and seeds growing
- Planting bulbs in autumn and observing changes in spring
- Looking at food plants (onions, garlic, beans) and their parts
- Watching time-lapse videos of seed germination
- Exploring seed dispersal (wind, water, animals)
- Reading traditional stories that feature growing plants (e.g. Jack and the Beanstalk)

Scientific enquiry:

Lesson 1: Identifying and classifying seeds using observable features.
Lesson 2: Performing a simple test to find out what seeds need to grow.
Lesson 3: Identifying and classifying seeds and bulbs by their features.
Lesson 4: Observing closely how a bulb changes over time.
Lesson 5: Gathering and recording data to compare plant health.
Lesson 6: Using observations and ideas to suggest answers about plant life cycles.

Builds on:

- EYFS: Exploring the natural world; noticing seasonal changes.
- Y1 Plants: Identifying common plants and parts; observing plant growth over time.

Future learning:

- Year 3 Plants: Parts of plants, functions, life cycle and seed dispersal
- Upper KS2: Reproduction, adaptation and plant classification

Coherence:

English:

- Use of descriptive vocabulary (e.g. smooth, rough, hard, shiny)
- Using comparisons ("This seed is bigger than...")
- Sentence stems for scientific thinking (“I think this plant is sick because...”)
- Speaking and writing explanations using key vocabulary (e.g. germinate, bulb, shoot)

Maths:

- Measuring height, weight and length of seeds and bulbs
- Counting and comparing quantities (number of seeds, roots, shoots)
- Recording observations in tables and tally charts
- Using ordinal numbers to sequence plant growth stages

Art:

- Drawing botanical illustrations of seeds, bulbs, and plants
- Observational drawing of textures and forms
- Exploring natural shapes and symmetry in plant parts

Geography:

- Exploring where different plants grow and how they adapt to local environments
- Comparing seasonal changes and how they affect plant life

Key vocabulary:

seed, bulb, germinate, sprout, root, shoot, leaf, grow, soil, warmth, temperature, water, light, food store, healthy, compare, observe

Book Recommendations:

Zhi Grows a Plant