

# Carrot Diary Lesson Plan

Intended Age: KS1

Subject: Science

## Curriculum Links:

### Working Scientifically

- Observing Closely
- Performing Simple Tests
- Using ideas and observations to answer questions
- Gathering and recording data

### Plants (Year 1)

- Identify and describe the basic structure of plants.

### Plants (Year 2)

- 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.

## Introduction:

Watch the Science Farm – Carrot Diary Video on [www.nfuonline.com/schools](http://www.nfuonline.com/schools). Recap the video: What happened in the video? What were they growing? What did the farmer do to help the carrots grow? What do plants need to grow?

Teacher Demonstration of planting carrot seeds.

## Main Session:

Students to write, draw or verbally explain steps. The students have now created a basic method for their growing experiment following the teacher demo. Students record this in the carrot diary.

Children now work in small groups to plant carrot seeds and draw week one in their diary.

### *For those that would find the above activity difficult-*

Teacher/TA can hold a group discussion of how the learners are going to plant the seeds. This could be recorded using a video camera or jointly written notes.

### *For those that would find the above activity too easy-*

Higher ability learners can choose a factor to test to identify how it affects growth. Students could look at several factors including: adding fertiliser to the soil, growing location (by the window for more sunlight compared to a shady area) or how much water the plant is given each week.

## Plenary:

The predictions envelope - students will make a prediction about which carrot plant they think will grow the best (and more importantly why).

These could be written by the teacher and placed in an envelope or recorded with a voice recorder or video camera.

## Extension Activities and more ideas:

- The carrot diary will allow students to record the growth of the carrots which will take around 2 months.
- There are lots more plants that can be grown indoors or alternatively the carrot diary can be used for growing areas outdoors.
- Comparing data is a crucial element to this experiment and many tests can be carried out during the growing process and post harvesting: lengths of roots, length of seedlings at different points, sweetness of carrots, size of carrots, temperature in different growing areas.

## Learning Objectives:

**To have a go at growing a carrot and record my method.**

**Too hard?** To label different parts of my own carrot plant experiment and investigate the factors that affect its growth.

**Too easy?** To have a go at growing a carrot, and explain my method to another student or my teacher.

N.B. Scientific language 'factors' may need explaining.

### Key Vocabulary:

Seed, Root, Leaf, Factor, Investigate, Water, Compost, Fertiliser, Light, Dark, Seedling, Method.