



K. Tending to the gardens

From planting to tending...

Tending involves the active and ongoing process of observing plants as they grow and maintaining the garden in the appropriate conditions.

Key ideas include: cooperation and competition for water, light and space amongst different living things in the garden and including human beings!

1. Linking back to the previous step – planting – growing food in planters or confined spaces like gardens depends on having adequate space both above and underneath the ground in order to grow healthily. Ongoing observations of seedlings as they grow are important as gardeners can check if such conditions are met.

Activity 1a. in the garden, children can make close observations of the growing space. What are the **general conditions of the seedlings**? Are there broken stems or squashed plants? If yes, who may be responsible, and what protective measures can be put in place? The teacher may facilitate a discussion with the children on how the garden may be protected from vandalism, the unwelcome visits of dogs, accidental damage or the feasting of snails?



Activity 1b. further observations may involve making **comparisons amongst plants of the same kind**. Do they all grow in the same way? What is their colour? And what are the conditions of the soil? Is it wet, too wet or too dry?



Previous Step: Planting and growing

By the end of this month, pupils will have:

1. Observed and recorded the growth of the plants;
2. Established a watering and weeding routine;
3. Measured and drawn stems, leaves, branches;
4. Described and communicated observations about leaf colour, shape, size, presence of flowers;
5. Recognised possible signs of hampered growth;
6. Taken responsibility for rubbish, debris, pests.



A **watering routine** will need to be established. In some cases, plants may be growing too close to each other and compete for light. If that happens, seedlings may be gently uprooted and replanted further apart.



2. Plant growth can be **observed and measured** both in numbers and with verbal descriptions. Through measurements, children can appreciate that similar plants may display different **growth rate** – that is - the height and length of the stems over time.



Through **verbal descriptions**, children can pay attention to the appearance of the plant: does it look healthy? And what does healthy mean? Particular features may include the **strength** of the leaves and stems (a healthy plant will have sufficient water content to ensure all green parts are strong and turgid); **colour** (discoloration of the leaves may be indicative of lack of nutrients in the soil); presence of **parasites**.

Activity 2a: a garden **journal** with simple tick boxes can be developed to incorporate observations over time.



3. The garden space is inhabited by many **living things**. Some may be occasional visitors; cats or dogs for example may leave traces. Cat poo may need to be regularly removed from the growing space. The soil will also attract other plants which had not been intended to grow in the garden, such as weeds.

Key idea: the term **weed** is often used negatively to refer to unwanted plants in the growing space. Weeds are an important source of food for insects and particularly pollinators (such as bees). However, weeds may not be of direct use to humans while competing with the crops for water, light and soil space.

Activity 3a: what is a weed? It is important for children to recognise what weeds are, why they are called 'weeds' and the roles they play in the garden.

Activity 3b: establishing a weeding routine. In groups, children can take responsibility for specific sections of the garden; decide how much and where weeds may be left to grow while ensuring they are regularly removed from the growing space.

Tending to the gardens across the Curriculum for Excellence

Health and Wellbeing

- uses a variety of approaches including **active, cooperative and peer learning** and effective use of technology
- encourages and capitalises on the potential to experience learning and new challenges in the **outdoor environment**
- encourages children and young people to act as **positive role models** for others within the educational community
- leads to a lasting commitment in children and young people to follow a **healthy lifestyle** by participation in experiences which are **varied, relevant, realistic, and enjoyable**
- helps to foster **health in families and communities** through work with a range of professions, parents and carers, and children and young people, and enables them to understand the responsibilities of citizenship
- harnesses the experience and expertise of **different professions** to make specialist contributions, including developing **enterprise and employability skills**.

Sciences

- demonstrate a secure knowledge and understanding of the **big ideas** and concepts of the sciences
- develop **skills for learning, life and work**
- develop the skills of **scientific inquiry** and investigation using **practical techniques**
- develop skills in the **accurate use of scientific language**, formulae and equations
- recognise the impact the sciences make on **my life**, the lives of others, the environment and on society
- develop an understanding of the **Earth's resources** and the need for responsible use of them
- express opinions and **make decisions** on social, moral, ethical, economic and environmental issues based upon sound understanding
- develop as a **scientifically-literate citizen** with a lifelong interest in the sciences
- **establish the foundation** for more advanced learning and future careers in the sciences and the technologies.

Numeracy and Mathematics

- develop a secure understanding of the concepts, principles and processes of mathematics and apply these in different contexts, including the world of work
- interpret numerical information appropriately and use it to draw conclusions, assess risk, and make reasoned evaluations and informed decisions
- apply skills and understanding creatively and logically to solve problems, within a variety of contexts