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### Apple & Pear Australia Ltd – Grow Your Learning Land to Lunchbox Program

Pre-excursion resource

Life Cycles

The Early Years, Level A–D, Foundation – Level 2



Kindergarten – Year 2

### 💷 🛛 Level

The Early Years, Level A–D (Towards Foundation), Foundation – Level 2

## 1 Activity description

Students explore how plants are grown for food. They learn about living things and life cycles. Students match words with pictures and order their findings in a correct sequence. They identify common features of a plant such as flowers, leaves, fruit, stem and roots and discover the importance of each part and how it contributes to making delicious fruit.

## 📴 Key topics

Science – Life Cycles

## Naterials required

- Coloured pencils
- Scissors
- Glue
- Worksheet: Life Cycle of an Apple
- Worksheet: Life Cycle of a Pear
- Worksheet: Plant Parts
- A3 paper

Instructions

- 1. Discuss the concept of life cycles as a whole group using the following questions as a guide for a teacher-led discussion. Use a whiteboard to share keywords and ideas.
  - Who knows what a life cycle is?
  - What features are part of all living things?
  - Do both plants and animals have life cycles?
  - Are their life cycles similar or different?
  - Why are life cycles often displayed as a circle?
- 2. Distribute either a Life Cycle of a Pear worksheet or a Life Cycle of an Apple worksheet to each student.
- 3. Discuss each of the words and pictures listed on the worksheet. Using scissors, ask students to cut out each of the individual words and pictures on the worksheet and match them correctly.
- 4. Tell the students to arrange their pictures/ words in a circle to represent a cycle on the A3 paper provided. Once the pictures and words are arranged correctly, students glue them onto the paper.
- 5. Distribute the Plant Parts worksheet to each student. Using the keywords and descriptions, label the plant. As an extension activity, students complete the sentences with the keywords.
- 6. Ask students to share their work with other students around them and display students' completed life cycles around the classroom.

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## ${}^{\bigotimes}$ Suggestions for assessment

Participation in class and small group discussions. Use of key vocabulary. Successful completion of the worksheets.

## Curriculum links

#### The Victorian Curriculum

Towards Foundation – Level D Science

Living things can be plants or animals. Observing the life cycles of living things (VCSSU032).

#### Foundation – Level 2 Design and Technologies, food and fibre production

Explore how plants and animals are grown for food, clothing and shelter (VCDSTC015).

#### Science

Living things have a variety of external features and live in different places where their basic needs, including food, water and shelter, are met (VCSSU042).

## Background information

A life cycle is a series of stages a living thing goes through during its life. All plants and animals go through life cycles. In some cases, the process is slow and the changes are gradual.

A plant's life cycle starts as a seed. When a seed starts to grow, we call it germination. When a plant is mature, it produces flowers. Flowers are fertilised, sometimes by animals or insects like bees, or by the wind. After a flower is fertilised, most plants make seeds in the form of fruit. The seed inside the fruit can be planted and will grow into a new plant, and the cycle starts over again.

Planting fruit trees is rewarding and encourages a connection to the natural environment and sustainable living. It is important for students to learn to grow their own food from an early age.

Australia has many different climate types. Before you consider planting an apple or pear tree or any other plant, you need to consider the climate you live in and consider the following: rain, soil type, soil health and drainage. Other growing conditions such as available space, temperature and available sunlight are also important.

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#### Worksheet: Life Cycle of a Pear

Make your own life cycle of a pear. Read the information and arrange the life cycle in the correct order. Cut out each of the pictures and words below. Match the picture with the correct word and glue in the correct order on a piece of paper.

1. **SEED** – The life cycle of a pear starts with a seed. FLOWER 2. **SEEDLING** – The seeds are 61 planted in soil and watered. The seeds germinate and a tiny shoot appears. The seedlings have small roots and a stem. 3. TREE - With healthy soil and water the pear tree slowly SEEDS grows. 4. FLOWERS - On Australian orchards it takes approximately 3-7 years for pear trees to flower and produce fruit. FRUIT 5. **FRUIT** – Pears are a delicious soft fruit. After about 10-15 years, the fruit production from the tree decreases. This is when they are replaced and replanting commences. TREE **Fun Facts** • Pears are part of the rose family. • Every Australian pear has been picked by hand. SEEDLING • Pears mature on the tree but ripen best off the tree.

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#### Worksheet: Life Cycle of an Apple

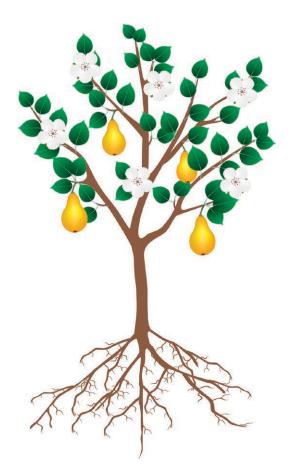
Make your own life cycle of an apple. Read the information below and arrange the life cycle in the correct order. Cut out each of the pictures and words below. Match the picture with the correct word and glue in the correct order on a piece of paper.

1. **SEED** – The life cycle of a pear starts with a seed. FLOWER 2. **SEEDLING** – The seeds are planted in soil and watered. The seeds germinate and a tiny shoot appears. The seedlings have small roots and a stem. 3. **TREE** – With healthy soil and water the apple tree slowly **SEEDS** grows. 4. FLOWERS – An apple tree typically flowers/blooms anywhere from early spring to late summer. 5. **FRUIT** – Apples are crunchy FRUIT and sweet to taste. The number of years it takes for an apple tree to mature, flower and bear fruit depends on which variety of apple tree you have planted. TREE **Fun Facts** • Pink Lady are the most popular apples in Australia. Apples belong to the rose family. SEEDLING • They are a healthy fruit, full of fibre.

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#### Worksheet: Plant Parts

Label the plant below with the following keywords: flower, leaves, fruit, stem, roots.



**Roots** – Take in water and food from soil. Anchor the plant. The roots of a plant are spread out.

**Stem** – Transports water throughout the plant. Raises the height of flowers and leaves, and brings them closer to the light. The stem is made up of little tubes.

**Leaves** – Different shapes. Almost always green but sometimes covered with another colour such as red. Green substance in leaves is called chlorophyll. Leaves make food for the plant. To do this they need water and mineral salts obtained from the soil. They are carried inside little veins in the leaf. To make food, leaves also need sunshine and carbon dioxide ( $CO_{2}$ ).

**Flowers** – Flowers produce seeds which form new plants. Space and warmth is also needed for a plant to grow.

### Extension Task

Use the keywords (flowers, stem, roots, leaves, fruit) to complete the following sentences:

- 1. The \_\_\_\_\_\_ take in water and mineral salts from the soil. They anchor the plant into the ground.
- 2. The \_\_\_\_\_\_ is like a straw. It moves water around the plant. It raises the leaves and flowers of the plant off the ground.
- 3. The \_\_\_\_\_ is delicious to taste and healthy to eat.
- 4. The \_\_\_\_\_ of a plant produce seeds.
- 5. The \_\_\_\_\_\_ make the food for the plant. They use water and mineral salts together with sunlight and carbon dioxide to make food.