# Fresh Story | Apples



An apple tree is a deciduous tree, meaning it loses its leaves in the fall. During the winter months, apple trees are dormant. In early spring, as temperatures rise, the tree grows from buds that overwintered. In mid to late spring, a flower cluster that contains five individual flower buds blooms into pink and white blossoms. The apple blossoms are pollinated by bees and other pollinators by transferring pollen between the flowers of different apple varieties, enabling fertilization where compatible. In early summer, fertilized flowers drop their petals and grow into tiny fruitlets and grow throughout the summer into larger apples to ripen and pick in the fall! In a modern orchard, mature apple trees range in size from 3-4 meters tall.



Nova Scotia apples are stored in a special way to stay fresh all year. Apples are kept in large bins in controlled atmosphere storage rooms. The oxygen is lowered in these rooms, which slows down the apples' ripening, allowing them to stay crisp and tasty for months. Thanks to hardworking farmers, we can enjoy apples anytime.

Nova Scotia has been growing apple trees for over 400 years! There are 2130 hectares of land in apple production.

#### **Did you know?**

- It can take up to 5 years for a farmer to harvest apples from a new apple tree.
- Farmers do not grow apples from seeds. They grow them from the shoots of existing apple trees joined to small rootstocks that start off in a nursery.
- We grow most of the province's apple trees in the Annapolis Valley, which has a very good climate for apples.
- The Honeycrisp apple has quickly become one of the most popular apples grown in Nova Scotia.



### Apple Tree Life Cycle



ootstalk (tree grafting



Nurse Grows ir

First Leaf Plant in Orchard



Second Leaf Plant in Orchard Limbs Continue Growing to Establish Fruiting Structure



Verse

Year 3

Yea

Year 5

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### **Activities for Grades P-3**

**SCIENCE** – Ask students to either draw an apple or draw the life cycle of an apple tree. Apple investigation – Remove the seeds from a few different types of apples and have students compare the seeds and count them. Use a magnifying glass to have a close up look at the apple skin, flesh and seeds. VISUAL ARTS – Apple Printing - Materials needed: an apple, knife (teachers should do any cutting), paint, paper or aluminum pie plate. Instructions: cut an apple in half, dip the cut side of the apple into the paint, press the apple on your paper, repeat.

**ENGLISH LANGUAGE ARTS/SCIENCE** – Apple Variety Test - With this activity, we will explore different kinds of apples. Teachers can have different types of apples (eg. Cortland, Gravenstein, Paula Red, Gala) available for this activity or explore different varieties online. Describing how each apple, tastes, smells, and feels. Think about which one is your favorite and describe which one you like the least. After you finish, rank the apples from your most to least favorite.

### **Activities for Grades 4-6**

**SCIENCE** – Apple Decomposition - In this activity, you will observe how apple slices decompose over time. Place apple slices in a plastic bag with soil and keep the bag sealed to create a mini ecosystem. Over several weeks, check the bag regularly and note any changes in color, texture, and smell. Draw pictures of each stage of decomposition to show what is happening to the apple slices. This experiment helps us learn about how organic matter breaks down and returns nutrients to the soil.

**MATH** – Apple Graphing – with this activity have a few different kinds/sizes of whole apples. Have the students create a table with variables in one column such as weight, measurement around the apple, height and even sensory data such as taste/crunch etc. Learners can then compare the different types of apples. VISUAL ARTS - Salt Painting - https:// littlebinsforlittlehands.com/salt-painting/ Materials needed: liquid glue or craft glue, salt, food colouring, water, paintbrushes, white card-stock or heavy paper. Steps: Have students use the glue to create an apple tree or apple design (they can create a template if they wish beforehand to use to trace on a design). Add glue to the outline of the shape. Then add a good amount of salt onto the glue and carefully shake the access salt off. Let the glue and salt dry. Mix a few tablespoons of water with your choice of food colouring. Dip a paintbrush into the watercolour and drip onto the salt very slowly as the salt will soak up the colour quickly. Leave to dry.



Sustainable Canadian Agricultural Partnership





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