



**Grade Level:** K-2

**Essential Skills:** 5, 9

**NGSS:** K-LS1-1, K-ESS2-2, 1-LS1-1, 2-LS2-1

**CCSS:** L.K.5, SL.K.1, SL.K.5, SL.1.4

**Time:** One class period

**Materials:**

**Growing Bracelet Kit\* or:**  
6 colored beads per student,  
one green pipe cleaner per student

\* Free kit with all materials available to Oregon educators; order from our [Lending Library](#).

**AITC Library Resources:**

**Books:** *Apples to Oregon*, *Apples of Your Eye*; *Apples: A True Book*  
*Oh Say Can You Seed?: All About Flowering Plants*

**More Lessons:**

Apple Faces  
Apple Songs  
Seed, Soil, Sun  
Living Necklaces  
Garden in a Glove

# Lesson to Grow

## Growing Bracelets

**Description:**

Students make “growing” bracelets and learn about the basic elements plants need to grow and thrive.

**Directions:**

For a great way to begin this lesson, read an age-appropriate book, such as *Apples to Oregon*, written by Oregon author Deborah Hopkinson. This “tall tale” is based on a real person who lived in Oregon, Henderson Luelling. Plants need our help to survive sometimes, and this tale is no exception!



- 1) Each student receives a pipe cleaner and six beads (blue, brown, clear, yellow, green, and red).
- 2) Ask students to choose the sunshine bead (yellow), and place the bead on their pipe cleaner, and give them facts about the sun. **See below.**
- 3) Continue with the next three beads - brown (nutrients), blue (water), and clear (air). These four beads represent the essential elements plants need to live.
- 4) Next, have them put the green bead on for the plant. Finally, have them add the red bead, which represents the care and nurturing that goes into raising plants.
- 5) Adults may need to help them close their bracelets, but don't twist them too tightly.
- 6) After the bracelets are made, ask them again to review what each bead represents:  
**Sun** - yellow bead - the source of heat and light on Earth and it sustains life on our planet.  
**Nutrients**- brown bead - these are the vitamins and minerals plants require for healthy growth and development and are transported by the roots. They come in the form of different substances such as fertilizers.  
**Water** - blue bead - is a clear, odorless and tasteless liquid. Water is essential for plants and animals to live. Living organisms are made up of mostly water - plants typically are 90+% water.  
**Air** - clear bead - is a colorless, odorless, tasteless gas. Air provides plants with life giving carbon dioxide. Plants “breathe in” the CO2 through their leaves and “breath out” oxygen.  
**Plant** - green bead - can represent a crop plant, tree, or anything they'd like to grow.  
**Care** - red bead - represents the care and nurturing on which plants thrive.

**Extension Activities:**

1. Compare and contrast the needs of a human and plant. Draw two circles and label one “humans” and one “plants”, list the needs of each, and the common needs in the overlapping area. This is a Venn diagram (see photo at right).
2. Have students write or draw pictures about how plants can change their environment to meet their needs. Examples: sunflowers turning with the rising and setting sun, tree roots pushing up concrete, fleshy leaves to hold more water, or seeds that stick on fur to move away.