

# PLANTING TOMATOES

**Focus Lesson: What do plants need to grow?**

**Materials:**

Styrofoam cups  
Soil (moist)  
Sunlight  
A closet  
Tomato seeds  
Observation Folders with blank paper  
Pencils

**\*Common Core Standards:**

**CCSS.ELA-Literacy.SL.2.1**

Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groups.

**CCSS.ELA-Literacy.L.2.3**

Use knowledge of language and its conventions when writing, speaking, reading, or listening.

**Thinking Skill: Hypothesizing & Observation**

**Objective:**

Students will understand the elements a plant needs to grow  
Students will know how to plant seeds  
Students will know what a hypothesis is and how to make one  
Students will use prior knowledge to make a hypothesis  
Students will record observations  
Students will use a ruler to measure the growth of their plants  
Students will draw diagrams of their plants

**Connection:**

In order to make tomato sauce for our pizzas, we have to have tomatoes! All plants, including tomatoes, need three things to live. Who can name them for me?  
- discuss water, sun, and soil

### **Explicit Instruction:**

We learned all about what we find in soil and the things it needs to be able to help plants grow healthy and strong.

Water is very important because it keeps the plant hydrated. Who knows what happens when a plant doesn't get enough water? What if it gets too much water?

And finally, plants use energy and warmth from the sun to create nutrients like sugar for themselves. Without these things, plants have a hard time growing.

We're going to experiment with some of these healthy growing ingredients by growing our own tomato plants.

### **Guided Practice:**

We're going to make a hypothesis about where we think the plants will grow best in the room. We'll have three choices: a table directly under the window, in a corner away from the window, or in the closet.

- Does everybody know what it means to make a hypothesis? It means we're going to use our knowledge to guess where the plants will grow the best.

Pass out tomato planting folders.

- On the first sheet of paper in your folder, make a hypothesis about where the plant will grow best.
- Write on the board: I believe the plant will grow best in \_\_\_\_\_.

Ask for a show of hands for who voted on each part of the classroom. Create a chart that documents who chose what location.

Pass out styrofoam cups to every student. Cups should be pre-filled with moist soil in order to avoid total chaos with students and dirt. Pass out two tomato seeds to each student. Instruct students to use their finger or a pencil eraser to put make two holes in the soil. Drop seeds in and cover with soil.

Draw names out of a hat to figure out whose plant will be placed where in the classroom.

- Some people's plants might grow better than others. Don't be upset if yours doesn't grow big and strong. It's all part of the experiment!

### **Independent Practice:**

Students are responsible for watering their own plants and for keeping track of the growth of their plants. Schedule a short time period, twice a week, where students can measure the growth of their plants. Walk through how to use a ruler to measure, and then draw a picture of, the plant on their paper in the same length. Ideally, students whose plants are in the sunlight should grow the fastest. Make sure they record the date of each of their observations so that you can review growth over time.

### **Reflection – Group Share:**

After an appropriate amount of time (preferably once there is noticeable plant growth) gather the class together and discuss why some plants are growing faster than others. Review the necessity of sun and compare how much students are watering their plants. Some may be remembering to do it every day while others are either doing too much or too little. What does the sun do to the water?

### **Reading List:**

*Blue Potatoes, Orange Tomatoes: How to Grow a Rainbow Garden* by R. Creasy  
*Living Sunlight: How Plants Bring the Earth to Life* by M. Bang and P. Chisholm  
*One Well: The Story of Water on Earth* by R. Strauss  
*Secrets of the Garden: Food Chains and the Food Web in Our Backyard* by K. Zoehfeld  
*I Will Never Not Ever Eat a Tomato* by L. Child

### **Teacher Note:**

Student folders should include multiple blank pieces of paper for students to draw pictures of their plants. During free time, invite students to decorate the covers of their folders.