

## SESSION 5

**Topic:** Chart the Growth

**Objective:** Children will be able to describe the plant growth process from seedling, to fruit, to harvest. Children will understand that they need water, fruits, vegetables, and physical activity to grow healthy and strong.

**Key Concepts:** Children ages 2-5 years old experience rapid physical development. Just as plants need water and sunshine to grow healthfully, children need water, a healthy diet and physical activity in order to grow healthy and strong. A healthy diet and physical activity are essential to human growth and development.

### Materials Needed

- “Plant Splash Relay” game instructions
- 2 Baskets
- Small blue balls for each child
- Session 5 discussion card
- Book: Pumpkin, Pumpkin by Jeanne Titherington
- Poster with pumpkin cutouts
- “Head, Shoulders, Knees, and Toes” song lyrics
- Tummy Mindfulness and Experiential Eating protocol
- Fruit, vegetables, and napkins for tasting
- Tummy dolls
- Watering cans
- “Seedling Song” lyrics
- “Follow the Leader” game instructions
- Measuring tape

### Diet or Physical Activity Guideline or Recommendation

2000 CDC Growth Charts for the United States: Methods and Development (CDC):

<http://www.cdc.gov/growthcharts/2000growthchart-us.pdf>

Facts about child development (CDC): <http://www.cdc.gov/ncbddd/childdevelopment/facts.html>

Preschooler Development (Medline): <http://www.nlm.nih.gov/medlineplus/ency/article/002013.htm>

Early Childhood Obesity Prevention Policies (IOM): Recommendation 3-1, Recommendation 3-2, Recommendation 3-4, Recommendation 4-2, Recommendation 4-4, Recommendation 4-6  
<http://bit.ly/2l5K6aD>

## NAEYC Recommendations Satisfied

Curriculum 2.A.03, Curriculum 2.A.08, Curriculum 2.A.10, Curriculum 2.A.11, Curriculum 2.A.12, Curriculum 2.B.05, Curriculum 2.C.03, Curriculum 2.C.04, Curriculum 2.D.02, Curriculum 2.D.03, Curriculum 2.D.07, Curriculum 2.F.02, Curriculum 2.G.02, Curriculum 2.G.06, Curriculum 2.G.08, Curriculum 2.K.01, Health Standard 5.A.06

## Review [10 minutes—game]

- **Game:** In order to review the importance of drinking water and watering the plants, the children play the “Plant Splash Relay” game.

## Classroom Activity [15 minutes—discussion, song]

- **Discussion 5a:** This session builds upon the previous session as we continue to talk about growth and development in children and plants. Choose one of the two activities below and alternate between them each time this session is implemented.
  - The **teacher** reads Pumpkin, Pumpkin by Jeanne Titherington. The children act out each page of the book as it is read. For example, we start crouched down, then we grow as the pumpkin grows, and when he carves a face out of the pumpkin, we tell them to make their best pumpkin face.
  - Children review the growth process of a pumpkin using the poster with cutout pictures of the story. Ask the children to act out what they see in the pictures.
- **Song:** The teacher explains that just as plants grow up to be big and strong, so do we. The teacher leads the children in the “Head, Shoulders, Knees, and Toes!” song.
  - Instruct the children to place both hands on the part of the body as they are mentioned. Walk through each body part to ensure they understand before starting. Repeat the song several times and speed up with each verse.

### Lyrics

Head, shoulders, knees and toes,  
Knees and toes.

Head shoulders, knees and toes,  
Knees and toes.

And eyes, and ears, and mouth,  
And nose.

Head, shoulders, knees and toes,  
Knees and toes.

## Mindful Eating [15 minutes—tummy mindfulness, experiential eating]

- **Tummy Mindfulness and Experiential Eating Protocol:**

- Direct children to wash their hands before their taste testing.
- Food should be served to the children with gloved hands.
- After washing their hands, the children are presented with fruits and vegetables from the garden (or grocery store if needed) to sample. Images of a body with an empty belly, full belly, and half full belly are available for the children to compare. The teacher describes the feelings of hunger and fullness to the children to increase their understanding of these concepts.
  - Before sampling the fruits and vegetables, the teacher asks the children if they are too full, just right, or hungry by asking them to point to the appropriate images.
  - The teacher then calls on a few children and asks them to describe what hunger or fullness feels like. The teacher tells the children that if they are not hungry then they should only take a small taste and a bigger taste if they are hungry.
  - After sampling the fruits and vegetables, the teacher asks the children if they are too full, just right, or hungry (point to the images).

**\*While the children are tasting, encourage positive conversation by making statements and asking questions that prompt the children to identify the color, smell, taste, and texture of the fruit or vegetable they are tasting, the sounds they make when they bite and chew, and what do they feel happening inside their mouths while they are chewing. Avoid statements that are coercive, like “just take a polite taste,” or “everyone has to try it.”**

*For example:*

“What **sound** was made when you chewed the celery? What do you feel happening inside your mouth while you chew? [*That celery was really crunchy and juicy.*]”

“How does the tomato **taste**?”

“What does the bell pepper **smell** like?”

“What does the cucumber feel like in your **hand**? [*It’s nice and cool.*]”

“What **color** are the strawberries that we are tasting?”

## Garden Activity [20 minutes—garden maintenance, song, garden exploration, game]

- **Garden Maintenance and Song:** The teacher leads the children outdoors to water the garden. Once finished, the students set their water cans down. Encourage students to sing the “Seedling Song” while they water.
- **Garden Exploration:** Using real fruits and vegetables, the teacher brings the children around the garden and shows the children the fruits and vegetables that are growing in the garden. Children are encouraged to identify the fruit or vegetable, its color, its shape, how it feels (i.e. smooth, fuzzy, etc.), what stage of the life cycle, what it needs to grow, and whether it is ready for harvesting.

- **Game:** In order to emphasize the importance of fruits and vegetables for growing healthy and strong, the teacher leads the students in a game of “Follow the Leader.”
  - The teacher chooses one of the children to be the leader and the rest of the children line up behind the leader or stand around the leader on the playground.
  - The teacher teaches the children a simple chant, “[Janet] is growing big and strong, look what she can do!”
  - The child who is the leader chooses an action such as skipping or hopping around the playground, the children follow the leader until the teacher yells out “Stop!” If necessary, the teacher can suggest actions for the child leader to choose from or tell the children what activity to perform. Options include digging, raking, jumping jacks, hopping side to side, silly dance, etc.
  - The teacher chooses a new leader and repeats the chant, “Kate is growing big and strong, look what she can do!” Repeat this game until several children have had a chance to play.

### Wrap Up/Review [5 minutes—discussion]

- The teacher measures the lima bean so that we can continue to chart its growth.
- **Discussion 5b:** The teacher reviews the current and past session concepts.
  - The teacher asks the children what plants need to grow healthy and strong (prompt the children to identify water, sunshine, and soil).
    - The teacher then transitions over to the drying leaf and shows the children what has happened to the leaf now that it is dried out.
      - The teacher prompts the children with questions such as “What does the leaf feel like?,” “What does the leaf look like?,” “Why has it changed from being soft and green to brown and dry?”
  - The teacher asks the children what they need to grow healthy and strong (prompt the children to identify fruits, vegetables, water, and physical activity).