

# *Pumpkin Pumpkin* – Sequence Me

## Connecting to the Virginia Science Foundation Blocks:

### *Life Processes:*

- 📖 Based on the Virginia Foundation Blocks:
  - “The child will observe and describe the characteristics of living things, compare the growth of a person to the growth of a plant and an animal, and describe the basic needs and life processes of each.”
- 📖 Additionally, the child will develop questions based upon observation skills and will develop fine motor skills.

## Connecting to the Early Childhood Environmental Rating Scale (ECERS):

### *Nature/Science:*

- 📖 Based on *All about ECERS*, this activity provides you with a collection of natural objects, as well as a developmentally-appropriate science activity (pp. 254-255).

### *Fine Motor:*

- 📖 Based on *All about ECERS*, this activity provides you with an opportunity to develop fine motor skills by practicing lacing (p. 190).

## Connecting to the Classroom Assessment Scoring System (CLASS):

### *Quality of Feedback:*

- 📖 Based on *All about CLASS*, this activity provides you with strategies to dissect thought processes by asking students to explain their reasoning (p. 69).

## Time Needed

- 📖 This lesson should take no longer than 10 – 20 minutes total.
- 📖 Complete the **Engage** and **Explore** portion of this lesson first.
- 📖 Complete the **Explain** and **Elaborate** portion of this lesson second.

## Fillin' the Noggin



### Science across the Curriculum

Real science begins with childhood curiosity, which leads to discovery and exploration with the help and encouragement of teachers. It involves three major components: content, processes, and attitude. Young children prize information about the world around them, yet an emphasis on content is not enough. Although many people view science as a body of knowledge (facts and formulas) that scientists learn and use, this body of knowledge is constantly changing as new discoveries are made. Like scientists, young children need to practice the basic scientific process skills of predicting, observing, hypothesizing, classifying, experimenting, and communicating (Conezio & French, Retrieved from <http://journal.naeyc.org/btj/200209/ScienceInThePreschoolClassroom.pdf>).

## Gettin' Ready



-  (1) set of pumpkin life cycle cards for each student (8 cards each)
-  Pipe cleaners for each student (1 white, 1 yellow, 2 green, 1 orange, 1 black or brown)
-  Colored pony beads for each student (1 white, 1 yellow, 2 green, 1 orange)
-  Scissors for each student
-  White cardstock for each student

## Here We Go...



## Engage

-  Read the book *Pumpkin Pumpkin* by Jeanne Titherington.



## Explore

### 📖 Activity One - **Pumpkin Life Cycle**

- The child will cut out and sort the 8 picture cards into the correct order of the pumpkin life cycle. Glue them onto the cardstock.

### 📖 Activity Two - **Pipe Cleaner Pumpkin Life Cycle**

- The child will use the four basic colors of the life cycle (white, green, yellow, and orange) to make pipe cleaner pumpkin life cycle pieces.
- Here is the correct order and color:
  - White = seed
  - Green = seedling and sprout (combined)
  - Yellow = flower
  - Green = green pumpkin
  - Orange = orange pumpkin



### 📖 Activity Three – **Pipe Cleaner and Pony Bead Life Cycle Bracelet**

- The child will use the colors of the pony beads to represent the correct order of the pumpkin life cycle.
- Here is the correct order and color:
  - White = seed
  - Green = seedling and sprout (combined)
  - Yellow = flower
  - Green = green pumpkin
  - Orange = orange pumpkin
- The students will take this activity home and will be able to explain to their family members the correct order of the pumpkin life cycle.



## Explain

- 📖 Dr. Gerald Wheeler, Executive Director of the National Science Teachers Association, confirms what most of us observe in our own children daily: “They’re natural scientists! They just need help with getting the right tools and making significant connections.” Kindergarten science standards vary from state to state, and even district to district; Wheeler says the curriculum should teach “the very basic foundations in and of science: observing, finding patterns, classifying, and grouping.” (Retrieved from [http://www.education.com/magazine/article/Kindergarten\\_Science\\_What\\_to\\_Expect/](http://www.education.com/magazine/article/Kindergarten_Science_What_to_Expect/)).
- 📖 Give your students the opportunity to ask LOTS of questions. Stimulate their brains by having them question things, analyzing their thought process. Foster an environment where they can experiment and conduct hands-on activities.

## Elaborate

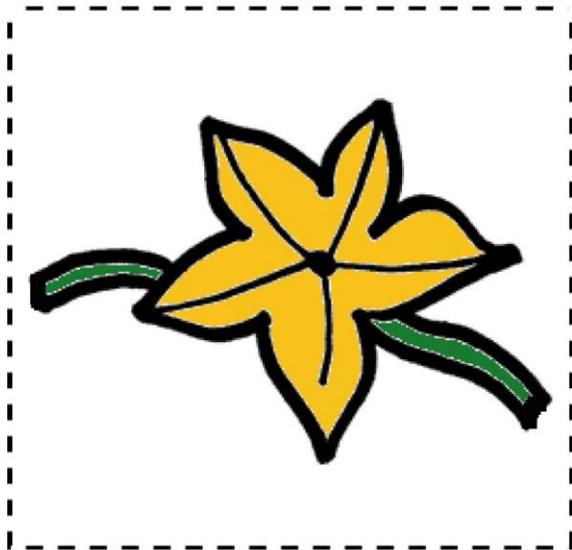
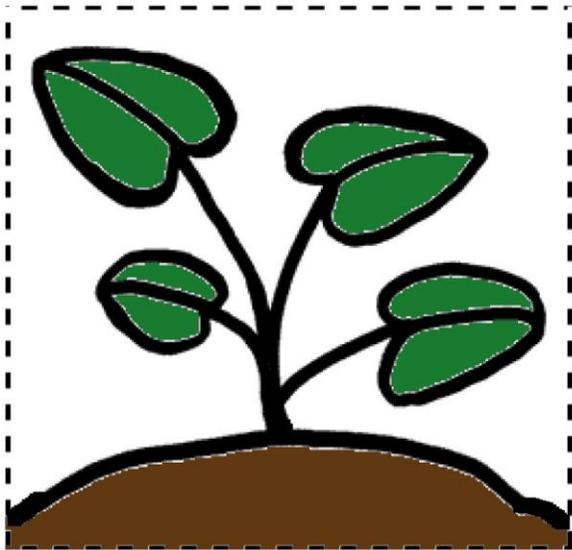
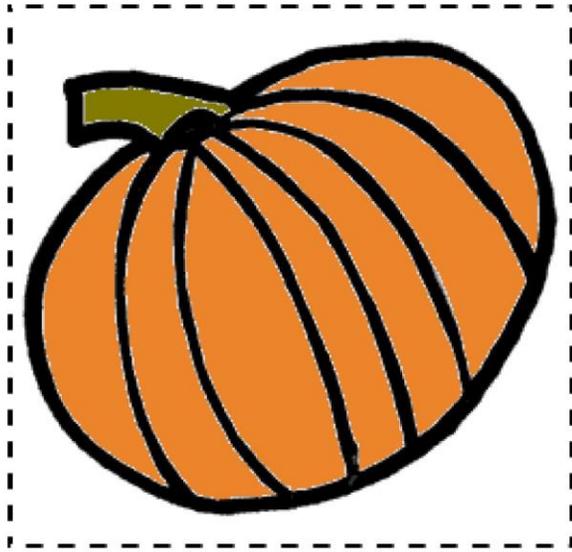
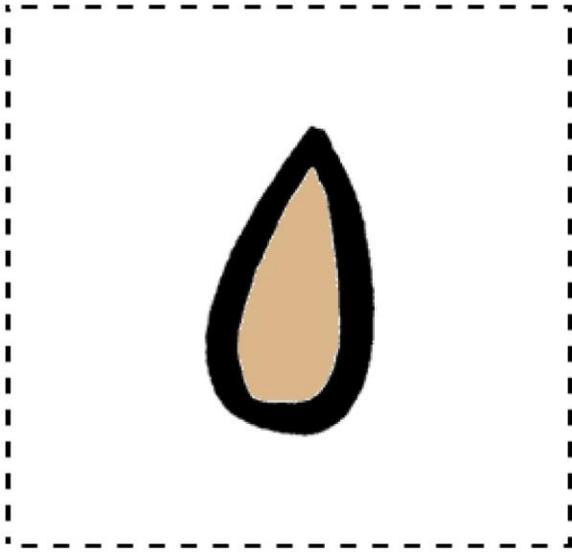
- 📖 Allow the children to cut open an actual pumpkin and explore the inside contents. Explain that this is the final stage of the “scientific” life cycle. After the pumpkin is harvested, you can decorate, cut or cook it. The children may want to roast the seeds and eat them, or they may want to play in the pulp; squishing the seeds between their fingers is a great tactile lesson. They will be able to incorporate and use all of their five senses with this hands-on science lesson.

## Connectin’ with Bookworm – Other Great Kindergarten Science Books



- 📖 *Flower Garden*. E. Bunting. Illus., K. Hewitt. 2000. Voyager Books.
- 📖 *Jack’s Garden*. H. Cole. 1997. Mulberry Books.
- 📖 *A Seed Is Sleepy*. D.H. Aston. Illus. S. Long. 2007. Chronicle Books.
- 📖 *From Seed to Plant*. G. Gibbons. 1993. Holiday House, Inc.
- 📖 *Growing Vegetable Soup*. L. Ehlert. 1991. Houghton Mifflin Harcourt.
- 📖 *The Tiny Seed: Big Book & Teaching Guide*. E. Carl. 2001. Aladdin.
- 📖 *Pumpkin Circle: The Story of a Garden*. G. Levenson. 2002. Random House Children’s Books.
- 📖 *From Seed to Pumpkin*. W. Pfeffer. Illus. J.G. Hale. 2004. HarperCollins Publishers.
- 📖 *I Like Pumpkins*. J. Smath. 2003. Scholastic, Inc.

Pumpkin Life Cycle Sequence Cards



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