



# Let's Study Seeds!

Developed by Tara Mollo, PCM Play Intensive 2021

(FOCUS: PreK-Kindergarten, Science, Mathematics, Language, Creativity & Making, Design Thinking)

With this activity students will talk about and compare the size of the seeds, the color of the seeds and quantity of the seeds. Students will make fruit and veggie collages that represent the seeds they chose. Students will learn from this lesson more about seeds, such as:

- What foods come from seeds.
- What seeds look like and how they compare to others.
- Seeds we eat and seeds we do not eat.

And, new Vocabulary:

- **Seed:** a small part of a plant that can grow into a new plant
- **Group:** many of something all together
- **Sort:** to put things in groups or piles
- **Represent:** to stand for or show something else
- **Collage:** a kind of artwork made by putting many small pieces together

## MATERIALS

- *From Seed to Plant*, by Gail Gibbons
- Prepared seeds or seeds from vegetables & fruits- i.e. seed vegetables (beans), fruit vegetables (tomatoes), flower vegetables (broccoli), melons, berries and/or citrus fruits.
  - Have about 4 different types of seeds per student; and give them about 5 seeds from each plant
- Pictures of the plant that the seeds came from (accommodation for MLL/ELL students)
- A couple examples of vegetable collages
- Kids magnifying glasses
- Small containers for sorting (egg cartons and styrofoam trays)
- Craft paper or construction paper
- Glue (liquid glue works better than glue stick to glue down seeds)
- Kids blunt scissors
- Markers, crayons, colored pencils, pencils

**Tools Use Prep:** Through modeling and show-me; have students demonstrate the proper way to hold and use scissors when cutting.

**Set Up:** Give each student at least 4 different types of seeds (giving them about 5 seeds of each plant); small tray or container; magnifying glass, pair of scissors; pencil, glue, and construction paper of assorted colors.



## STUDENT'S JOB

### Create a Vegetable or Fruit Collage

Time to do your investigation on your seeds, examine the seeds you have.

1. Talk with your partner about the size of the seeds, color of the seeds, and count how many seeds you have.
2. Sort the seeds into groups
3. Once finished with discussion begin to make the fruit or vegetable that represents the seeds you chose out of construction paper.
4. Then, glue on the seeds to your collage.

**Further Challenges:** This activity can be spread across a week for students to explore a variety of seeds.

## TEACHER'S JOB

### Standards Alignment:

#### [NEXT GENERATION SCIENCE STANDARDS: EARTH AND HUMAN ACTIVITY](#)

**K-ESS3-1.** Use a model to represent the relationship between the needs of different plants or animals (including humans) and the places they live.

#### [NEXT GENERATION SCIENCE STANDARDS: FROM MOLECULES TO ORGANISMS: STRUCTURES AND PROCESSES](#)

**K-LS1-1** Use observations to describe patterns of what plants and animals (including humans) need to survive.

[CCSS.MATH.CONTENT.K.COUNTING & CARDINALITY.B.4:](#) Understand the relationship between numbers and quantities; connect counting to cardinality.

[CCSS.MATH.CONTENT.K.COUNTING & CARDINALITY.C.6:](#) Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies.

[CCSS.MATH.CONTENT.K.GEOMETRY.A.2:](#) Correctly name shapes regardless of their orientations or overall size.


[CCSS.MATH.CONTENT.K.GEOMETRY.A.3:](#) Identify shapes as two-dimensional (lying in a plane, "flat") or three-dimensional ("solid").

#### [WIDA-ENGLISH LANGUAGE DEVELOPMENT STANDARDS](#)

**Language for Social and Instructional Purposes:** English language learners communicate for social and instructional purposes within the school setting.

**Language for Language Arts:** English language learners communicate information, ideas and concepts necessary for academic success in the content area of language arts.

**Language for Mathematics:** English language learners communicate information, ideas and concepts necessary for academic success in the content area of mathematics.



**Language for Science:** English language learners communicate information, ideas and concepts necessary for academic success in the content area of science.

**Connect to Previous Work:** This activity can be used as an introduction activity to a planting unit.

**Prepare/Background Info:** Read the book, *From Seed to Plant*, by Gail Gibbons. Discuss how a seed is a small part of a plant that can grow into a new plant.

**Extend/Take it Further:** Plant some of the seeds used. Have students take observational drawings of the plants as they grow and develop.

**Facilitation Strategies :** Give students directions and materials needed. Observe & record students' comments. Ask students some of the guiding questions during and after the investigation. Encourage students to talk to a partner or table about some of the guiding questions ; encouraging students to use new vocabulary taught.

Guiding Questions-

- What do you notice about these seeds?
- Which seeds are the smallest? the largest?
- Is this seed smaller or larger than this seed?
- How many seeds do you have?
- How can you organize the seeds? What categories are you making?
- Which category has the most seeds? The least?
- What kinds of plants will grow from each type of seed?
- Why do you think these seeds are different from each other?
- After giving the students materials, allow them the time to explore at their own pace (recording students' response as they are exploring, observing, and discussing with their classmates.

### Play to Notice (Learning Framework):

Experiential- Students will learn through hands-on exploration of seeds and through collaboration with classmates that seeds come in all shapes, colors and sizes.

Physical- Students will learn through sorting the seeds by colors, shapes and sizes that each type of seed is different. Students will also work on fine motor skills of cutting and pasting seeds to their seed collages.

Social- Communications and interactions with each other will help assist students to use new vocabulary taught and promote discussions on similarities and differences in the type of seeds.



**Content Matter to Notice:** Take note of children’s strategies for sorting. Record the mathematical and descriptive language children use to describe the attributes of the seeds as they sort.

