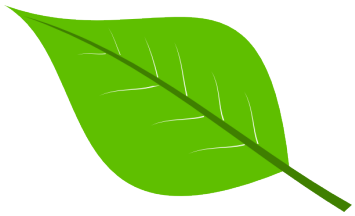
4. The Seeds of Life



This Lesson's Goals

- To affirm the value of diversity in the seed gene pool
- To promote the positive value of variety in all life
- To witness the miracle of life that can emerge from a simple seed
- To recognize how peoples' understanding of God's creation of the world may be expressed in a variety of ways and may be seen as all starting with a seed
- To develop appreciation of seeds as symbolic of God's gift of life

Opening [15-20 min.]

Gather for opening silent worship.

Week one: Open with the activity Two Peas In a Pod and follow with another activity about the value of diversity and end by planting seeds.

Week two: You could begin by reading *The Everything Seed* by Carole Martignacco and build a lesson around seed identification, seed art, and stories about sunflowers.

Sample Agenda

Posting a simple agenda can help both the teachers and the children stay on track. Pick and choose what you like. Also, this chapter could easily be two lessons. If you did the planting in different soils the previous week (Chapter 3), the follow-up activity is How Did They Grow?

1. **Opening:** Silent Worship, Song, Scripture, Sharing
2. **Large Group Activity**
3. **Small Group Activities:**
4. If your total program time is less than one hour, you may want to focus on two to four activities from those listed below, allowing for the age and size of your group, season and weather, and space and materials needed.
5. **Closing & Sharing of Take-Home Materials**

Songs

All God's Critters Got a Place in the Choir
Johnny Appleseed Grace
In the Bulb There is a Flower
Inch by Inch, Row by Row
I Am an Acorn

Scripture

Genesis 1:11-12 and Genesis 1:29
Then God said,

"Let the earth sprout vegetation, plants yielding seed, and fruit trees on the earth bearing fruit after their kind with seed in them"; and it was so. The earth brought forth vegetation, plants yielding seed after their kind, and trees bearing fruit with seed in them, after their kind; and God saw that it was good."

Then God said,

"Behold, I have given you every plant yielding seed that is on the surface of all the earth, and every tree which has fruit yielding seed; it shall be food for you; "

Scripture Discussion

God said, "I have given you every plant yielding seed that is on the surface of all the earth, and every tree which has fruit yielding seed; it shall be food for you; " Who is this food for? What other living things depend on seeds and plants? How might we be sure there is enough for all God's creatures?

Large Group Activities

Two Peas in a Pod [5-10]

Materials: Use peanuts in the shell [allergy alert], sunflower seeds with shells on, almonds with husks [minor allergy alert], snap peas, or walnuts.

Give a seed to each person. Share these instructions:

- "Observe your seed very carefully. Do not mark it in any way."
- "Compare your seed with one other person's. Talk about what is alike and different."
- Collect all the seeds and put them in a central place.
- Ask each to find his or her own seed again.
- When they have found their seeds, ask how they identified their own. Note the value of looking closely to see very small differences. Discuss what made this easy or hard to do, in what way all the seeds looked alike and yet were unique.
- Finally, invite the participants to keep or eat their seeds.

How Did They Grow? [5]

[This could be part of the opening if you planted the previous week.] Bring back the potted plants that have been growing in different soils and fertilizers. [see Chapter 3]. Ask the children to help arrange the pots in order of health. Discuss which of the combinations worked best and why.

Small Group Activities

1. Why More is Better [5-10]

Discussion prompt: Why would members of the same family (whether people or plant) be susceptible to the same disease? Validate children's guesses and speculations.

Teacher shares: Sometimes a plant disease comes along and destroys all of a certain species of plant. When one variety of potato became the main crop in Ireland in 1845, a potato blight hit the country very hard. The potatoes turned black and rotten in the fields and in storage. 10% of the population died in the first three years. Half the population either died or emigrated before the end of the century.

You can count the number of seeds in an apple, but no one can count the number of apples in a seed!

Discussion prompt: Still, today, it turns out that people grow fewer varieties of many plants now than in the past. Why? Validate children's guesses.

Teacher shares: One reason is that farmers want all their wheat to ripen at the same time or all their tomatoes to be the same size at harvest to ship better. So they plant specially made seeds, which produce plants that are easier to get to market. But this has its risks. Lack of diversity means huge farms could be wiped out all at once by a disease affecting one particular plant family. This is why so many of us, in our home gardens, grow lots of different varieties of plants. Where one variety might get sick and die from disease, other varieties will resist the disease and make healthy seeds for us to plant again another year.

Discussion prompt: Can you guess how many different varieties (types) of tomato there are in the world? Other than preventing disease, why would having more varieties of plant seeds be important?

Teacher shares: There are more than 10,000 varieties of tomatoes!! It makes sense because every garden habitat has different condition. Different varieties evolve to match these conditions. Some handle heat better, or don't need as much water, or can draw the food they need even from poor soil. Because there are so many different varieties, more of them can thrive and contribute to their plant community.

2. Sunflower Storybooks [5-15]

Read from the picture story books *Sunflower House, Sunflower Sal,* or *This is the Sunflower.* Could you find a place to grow a sunflower house?

3. The Universe in an Acorn [10-25]

The Everything Seed written by U.U. minister Carole Martignacco, combines the facts of science and the wonder of myth. The story starts with a plant's origins in a seed to the birth of the universe.

Invite children to share what they heard in the story. Asking each child to offer one aspect that interested or surprised them in the story. This may be a good way to discern what other queries you might offer.

4. Seed Identification [10-15]

Materials: Bring in as many seeds as you can find in your kitchen and garden.Examples: rice [white, brown, wild], peas [chick, green, black-eyed], beans [kidney, pinto, navy, lima, acorns, almonds, anise seeds, apple seeds, avocado pit, caraway seeds, cashews, cocklebur, coconut, corn, dandelion seeds...

Look at a variety of seeds, see how many the children can identify. Give younger children fewer and more common seeds to identify. Consider with the children:

- How can we tell each seed from the others?
- Can we eat it, or the fruit that grows outside it?
- How/where does it grow?
- How does it travel?
- What varieties does it come in?
- What would happen if there was only one kind of seed?
- Why would this be important do you think?

Snack Ideas

Serve mixed nuts and seeds or nut butters on rice cakes, crackers, popcorn, or wheat bread [allergy alert]. You can include pumpkin seeds (pepitas), walnuts, almonds, sunflower seeds, etc. To drink: coconut milk. Or serve chocolate soy milk. Both come from beans, as do coffee and most colas.

5. Seed Sprouting [10]

Materials: A bag of mung beans, seed peas or white beans. Paper towels. One plastic bag for each person.

Give each child 6 to 12 mung beans, seed peas, or white beans, two sheets of paper towel, and a plastic bag.

Wet one of the paper towels. Fold the beans loosely in the wet towel and wrap that up with the dry towel so both are "damp" and place them inside the plastic bag for carrying home.

Keep the beans at room temperature and damp for a week. Peeking is okay. Bring them back in a week to show. Sprouted beans are edible or may be planted.

Be sure to use fresh beans. Give the sprouting a trial run at home. If you take two weeks on this lesson, the sprouted seeds from the first week can be brought back and eaten at snack, or planted as the closing activity for the second week. You may need to sprout extra beans so everyone gets some.

"To plant a seed is to activate the deepest Mysteries of the Universe."
– Thomas Berry

6. Seed Art [5-15]

Materials: Seeds and seed pods in a mix of colors, shapes, and sizes. Those used for the seed identification activity will do. Yogurt lids or another container with a raised side. Optional: Glue sticks and magnets.

Give each child a small circle with a raised edge, such as a yogurt lid or frozen juice lid. Ask the children to make designs or simple pictures using a variety of seeds. When all are done, and everyone has looked at the designs, photograph the art. Then return the seeds to the craft supplies or put the disks outside where birds, squirrels, or mice may enjoy the seeds. This can be a good time to continue discussing the value of seeds.

How do seeds "know" what plant to grow into? How do we see genetics as one of God's wonders?

Talk about "playing with your food" and places that use food as decorations or materials for art or crafts which don't get eaten. Is that wasteful?

Look at illustrated cookbooks to see how different cultures [Japanese sushi for example] view the presentation of food as an edible art form. Does it make a difference to us what our food looks like?

You can glue seeds to the disk and put a strip magnet on the back to make refrigerator art, but remember, as with potato prints, apple dolls, or macaroni jewelry, the food used can't be eaten or the seeds planted.

Closing [15-20]

Sing "Inch by Inch" or other appropriate song.

Ask each child to finish the sentence "Today I learned..."

Close with silent worship.

Seeds
Word Scramble

Rearrange the scrambled letters to spell 12 seeds. Don't peek at the answers below until you have tried all twelve.

Which ones can you eat?

1. EASP
2. CRON
3. NEPAUTS
4. DIKYEN EBNAS
5. WORNB CIER
6. DACAVOO IPT
7. FRRENUSLOW EDESS
8. CHAWESS
9. DAMNOL
10. EWATH
11. ARCNO
12. OOTNCCU

Answer Key: peas, corn, peanuts, kidney beans, brown rice, avocado pit, sunflower seeds, cashews, almond, wheat, acorn, coconut