



green thumbs
growing kids

Patricia and the Pea Shoots

Grade level: Kindergarten to Grade 1

Lesson length: 60 minutes +

Curriculum links: Math (communication, connecting, reflecting, selecting tools and strategies, **D1**-creating and presenting **D2**-reflecting, responding, analyzing **D3**-exploring forms and cultural context) Healthy living and healthy eating choices, active participation and safety. Language, science (environment, communication, etc)

Materials:

‘Patricia and the Pea Shoot’ story adapted from Sandra and the Sunflower, Evergreen’s Patterns through the Seasons: A Year of School Food Garden Activities, kindergarten to grade 7, 2003.

A tray of grown pea sprouts for tasting --- Plant ahead 7 to 10 days for the sprouts to be edible

Clean scissors

Cups – one per child, plain white paper, available through coffee shops or in bulk from Alpha Eagle Group

Peashoot seeds. Improved cultivar for pea shoots available from Mumm’s Sprouting Seeds, <http://sprouting.com>, ask at your local natural food store. (You can use other pea seeds but they will often produce tendrils which are inedible.)

Trowels

Watering: spray bottles or watering cans

Crayons

Soilless mix (Seed-starting or potting soil, peat-based, no nutrients needed)

Pencil to poke holes in the bottom of the cup



Part One Activity – interactive storytelling & tasting (30 minutes)

Using the story of Patricia and the Peas you will tell the narrative in an interactive way (see attached story). After each section of the story, ask the students what Patricia should do differently. The story then repeats itself from the beginning. As a narrator you will retell the story multiple times until Patricia (change the name if you’d like!) is successful. You can also ask students from the class to act out the parts.

- **Start with** “I have a story to tell you about my friend named Patricia. She wanted to plant a garden...”.
- **After finishing the first story** i.e. “...A crow flew down from the sky and ate up the seed. THE END”, ask the students “**Was that a good story?**”, “**What did Patricia do wrong?**” and/or “**Where does the seed need to be placed to grow?**”.
- At the end you can get the students to sing a song so that retain what **elements plants need**. The following words can be sang in the tune of “Frère Jacques” with hand motions.

Sun and soil

Sun and soil

Water and air!

Water and air!

All the things we eat

All the things we eat

Everything we wear

Everything we wear

- **After finishing the story, you can pull out the tray of pea sprouts.** Demonstrate how to pick up a sprout with two hands (one hand holds the stem, the other hand breaks the stem) or use clean scissors to cut the stem instead.
- **Model eating the sprouts.** Students usually find them quite delicious and come back for more, but adults may need to demonstrate eating them first.

Part Two: Planting pea sprouts (30 minutes)

Tell the students it is easy to grow sprouts by a windowsill for eating.

STEPS to demonstrate:

1. Make hole in cup
2. Draw design
3. Fill with growing medium
4. Plant seeds
5. Water

- **The hole in the bottom of the cup is to ensure that the growing plants don't have wet roots.** By making the hole themselves children will grasp the concept. The safest method is to turn the cup upside down and have children use the pencil to make the hole in the middle of the bottom of the cup.

- The design on the cup can be anything. The crayon drawing also serves as the child's identifier, so children who are reluctant to draw can simply print their name or initials with help from staff. One idea is to draw a face, and when the sprouts appear they will be the green curly hair!
- Growing medium should loosely fill the cup, and the seeds should be laid out in one solid layer on top, rather than buried. Finally, the seeds are thoroughly watered. Leave plenty of time for this, and consider using a watering can with a fine rose, to avoid seed getting pushed all to one side. Alternatively have children water from a cup, slowly, with an objective of getting each and every seed fully drenched but staying in place.
- No special light is required. Seeds will sprout in a few days and be edible in one week. Keep moist: under clear plastic is good until the seeds sprout. Harvest at 10cm, shoots will regrow.

Extensions:

- Pea plants can be transplanted outside in the garden if you sprout the seeds at the right time in spring. However this is not the prime variety for edible peas, and peas are often not fond of being transplanted. A better choice would be to plant your garden peas when the pea shoots are finished.

References:

Sandra and the Sunflower story from Evergreen's Patterns through the Seasons: A Year of School Food Garden Activities, kindergarten to grade 7, 2003. Download Patterns Through the Seasons at <http://www.evergreen.ca/en/resources/schools/curriculum.sn> .

PATRICIA AND THE PEA SHOOTS

Read this story out loud to your class. You could invite a student to act out the part of the pea plant to add to the humour. After each section of the story, ask the students what Patricia should do differently. The story then repeats itself from the beginning; speed through the repeated sections as if in fast forward mode to keep the story moving along quickly.

Patricia decided to plant a garden. She wanted to grow all the things that had the same first letter as her name, but the only plant she knew that started with an P was pea shoots, so that was what she planted. Patricia got a pea seed from the garden shed and threw it on a rock. A crow flew down from the sky and ate up the seed. The End.

Hmmm. Something doesn't seem quite right about this story. What did Patricia do wrong? Oh... she should have put the seed in the soil. Let's try the story again.

Patricia decided to plant a garden. She wanted to grow all the things that had the same first letter as her name, but the only plant she knew that started with an P was pea shoots, so that was what she planted. Patricia got a pea shoot from the garden shed and planted it carefully in the soil. After

a few days, a sprout came up. Patricia put a box over the sprout to protect it from the sun. The sprout turned yellow and died. The End.

Ask for suggestions again, until the students say the pea shoots needs light.

Patricia decided to plant a garden. She wanted to grow all the things that had the same first letter as her name, but the only plant she knew that started with an P was pea shoots, so that was what she planted. Patricia got a pea shoot seed from the garden shed and planted it carefully in the soil. After a few days, a sprout came up. Patricia watched it grow straight up toward the sun. By the time the pea shoot was as tall as Patricia, the soil was quite dry. The pea shoots turned yellow, then brown, and one day it was so dry the stem broke in half. The End.

Ask for suggestions. The pea shoot needs water.

Patricia decided to plant a garden. She wanted to grow all the things that had the same first letter as her name, but the only plant she knew that started with an P was pea shoots, so that was what she planted. Patricia got a pea shoot seed from the garden shed and planted it carefully in the soil. After a few days, a sprout came up. Patricia watched it grow straight up toward the sun. By the time the pea-plant was as tall as Patricia's knee, the soil was quite dry. Patricia filled a watering can, and poured the water out all around the pea plant. The pea plant continued to grow, and after a few more weeks, a beautiful pink flower opened up. Patricia liked the pink colour so much that she painted the stem and the leaves to match. Of course the pea plant couldn't breathe through its leaves anymore, so it died. The End.

The pea plant needs air. Read from the beginning, then:

Patricia decided to plant a garden. She wanted to grow all the things that had the same first letter as her name, but the only plant she knew that started with an P was a pea shoot, so that was what she planted. Patricia got a pea shoot seed from the garden shed and planted it carefully in the soil. After a few days, a sprout came up. Patricia watched it grow straight up toward the sun. By the time the pea plant was as tall as Patricia's knee, the soil was quite dry. Patricia filled a watering can, and poured the water out all around the pea plant. The pea plant continued to grow, and after a few more weeks, a beautiful pink flower opened up. Patricia loved all the different colours on the pea plant – the green leaves and stem, and the bright pink petals around the flower. The bees loved the pink on the flower too, and spread pollen all around the pea plant. The flower made pea pods full of new pea seeds. Patricia sprouted most of the pea seeds and saved a few to put in the garden shed to plant next year. The End!