

Making Wildflower Seed Bombs

Overview: This activity involves learning about pollinators, pollination, and students making wildflower seed bombs in one class.

Curricular Connections

Growing flowers can be connected to many Big Ideas in the Science curriculum; these activities could be integrated into larger conversations about environmental responses, natural resources, internal systems, and natural selection.

Big Ideas	
Science	All living things sense and respond to their environment. (gr. 4) Earth materials change as they move through the rock cycle and can be used as natural resources. (gr. 5) Multicellular organisms rely on internal systems to survive, reproduce, and interact with their environment. (gr. 6) Evolution by natural selection provides an explanation for the diversity and survival of living things. (gr. 7)
ADST	Skills are developed through practice, effort, and action.

Indigenous Connections

One principle practiced in this unit is, "Learning is holistic, reflexive, reflective, experiential, and relational (focused on connectedness, on reciprocal relationships, and a sense of place)." This hands-on lesson can invite walks outside into natural spaces and discussions about native plants, traditional uses of them, and discuss First Peoples concepts of [interconnectedness](#) in the environment (gr. 5).

Lesson Design: Making Seed Bombs	
Student Learning Outcomes:	
<ol style="list-style-type: none"> 1. Learn how to make an environment for seeds to grow. 2. Learn about pollinators and their role in our ecosystems. 	
Driving Questions:	
<ol style="list-style-type: none"> 1. How can we grow plants to support pollinators? 	
Materials (for 25 students)	Costs
<p>Seed Bombs</p> <ul style="list-style-type: none"> • 1 packet of wildflower seeds for your area (or make your own mix) • Compost or potting soil • Powdered clay or 2 packets of air-dry modeling clay - break apart into small pieces (2 pieces about 1 tablespoon in size per student), can place in two 24-muffin trays for easy transportation • Paper towel/cardboard and markers <p>Packaging (optional):</p> <ul style="list-style-type: none"> • 1 toilet paper tube per student • Paint, brushes • Planting instructions printed out, or small papers to write on: "Plant this seed bomb where you want wildflowers to grow; cover with soil and water, or throw it along a roadway to make it beautiful." 	<p>\$20</p> <p><i>Compost/soil: \$5-10 for a small bag</i></p> <p><i>Modeling Clay: \$3</i></p> <p><i>Seed packet: \$4 each</i></p>
Lesson Design:	Classroom Set-Up:
<p>Wildflower Seed Bombs (45 minutes)</p> <ol style="list-style-type: none"> 1. Introduce pollinators and pollination. The following background on pollinators and flowers is from the SPEC Guide p. 65. <ol style="list-style-type: none"> a. What are pollinators? Bees (honey bees and native bees like the orchard mason bee), butterflies, and other insects that pollinate flowers. 	

- b. ***What is pollination?*** In order for fruit and seeds to form, pollen from the male stamens must be transferred to the sticky stigma portion of the female pistil. This is called pollination, and may occur by insects, birds, bats, wind or water.
- c. ***How do bees and other pollinators interact with flowers?*** Many flowering plants depend on pollinators such as bees to incidentally transfer pollen to the pistil. However, the true goal of the pollinator in visiting a flower is to obtain food in the form of nectar and pollen.
- d. For more detailed information and activities, see the [Pollinator Curriculum](#).

2. Introduce Seed Bombs:

- a. [What native plants attract pollinators in BC?](#)
Click the link and scroll down to check out *the Pollinator Planting Guide* for your region.
- b. ***Why do we want to plant native plants and wildflowers?*** To provide food (pollen and nectar) for pollinators. With more development in cities, there are less wildflowers and habitats for pollinators. *Click the link above and scroll down to find out more.
- c. ***Where will we plant these?*** Next to roads, at your house, etc. Places they will get sunlight and water.
- d. ***How will we plant these?*** They can be placed on the ground, or buried slightly under the soil and watered.

3. Make Seed Bombs



- a. Introduce the flowers that are in the wildflower mix in the seed package(s).

Seed bombs' supplies:

Compost/soil, clay broken into pieces, seeds in a large bowl, and paper towel/cardboard.



- b. Demonstrate how to make a seed bomb:
 - i. Mix the clay into the soil, so that it is about half of each, and the ball stays clumped together. If packaging them in toilet paper rolls, ensure they are small enough to fit.
 - ii. Dip the seed bomb into the bowl of seeds.
 - iii. Mix the seeds into the seed bomb.
 - iv. Place the seed bomb on a piece of paper towel or cardboard to dry out for at least a day.
- c. Bring class outside to avoid a mess inside. Bring the bowls of soil, clay pieces, and the bowl of seeds outside. Each student gets 2 pieces of clay, about the size of a tablespoon.
- d. Leave the seed bombs on cardboard/paper towel to dry for 24 hours.
- e. Students can plant them at home, at school. They do not need to be buried, but do need to be in a spot where they will be watered.

4. Packaging (optional)

- a. Each student paints a toilet paper tube.
- b. After it dries, put the seed bomb inside the tube, folding down each side, see photo below.
- c. Include instructions for how to plant them.



5. Reflection:

- a. Why do we want to plant more wildflowers?
- b. What food did you eat today that was pollinated?
- c. What wildflowers do you know? What role do wildflowers play in our ecosystem?
- d. What else would you like to know?

Additional Resources and Activities

- Learn about the [Secwepemc uses of plants](#)
- Dissect a flower, [Look Inside a Flower](#) video (<https://www.youtube.com/watch?v=R9sn7HZM7uY>)
- [Seeds We Eat Lesson](#) from Edible Schoolyard Project