

# STEAM studio

## DIY Seed Bombs

**Ages:** 5-12 with parent supervision and help

**STEAM Concepts:** Science, Art

**Time:** 20-30 minutes creating, 5+ hours drying

Seed bombs are a fun way to experiment with growing flowers, vegetables, or other plants. You can bomb your own garden, or give them to a friend, neighbor, or family member. However, with many experiments, it's important to make sure you are completing the activity carefully:

- First, you want to make sure that you are **planting in a place you are allowed to**—some seed bomb tutorials encourage you to throw seed bombs out in the wild, but for this program, we advise you to **only use the seed bombs in your own backyard.**
- Second, make sure you use **Native Plant Seeds.** Native plants have evolved to **thrive in the environment** where they grow, and **play an important** role in the local ecosystem by providing habitat, food, or another service that helps biodiversity. If you aren't sure what plants are native to the Okanagan (or where you live), you can call a local gardening center or visit some of the websites at the end of this tutorial.
- Third, make sure that you are able to **keep an eye on the seed bomb you have planted and that you take care of it.** Some seed bombs may not germinate the first time you try to make them, or you may find that one recipe works and another doesn't for your back yard. That's okay! Part of the experiment is discovering what works for you, and the other part is making sure you care for the results!

**Let's get started!**



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## VOCABULARY



Golden Aster

### Native Plants

- Have evolved over time to thrive (do really well) in the environment where they grow
- Play an important part in the local ecosystem by providing a habitat/shelter, food, or another service that helps biodiversity
- Have ecological checks and balances to keep them under control
- For example: are eaten by birds, insects, or other animals so they do not grow too much

### Non-Native Plants

- Have NOT evolved in the environment where they grow
- Were introduced from somewhere else in the world with human help
- Some examples: decorative plants used in landscaping, crops (corn is from Mexico) imported for agricultural use, or by accidental transfer (shoes, clothing)
- Most countries have very strict rules about importing non-native plants now, and this is why there are questions about fruits and vegetables when you fly or cross the border



Morning Glory

### Invasive Species

- Non-native plants that seriously disrupt the biodiversity of a region
- Become very abundant and reduce the amount of native species in the area they grow in
- Nothing that eats or moderates the growth of these plants
- They take over an area and push out the native plants, using their soil and water resources

### Xeriscaping

- Xera, from the Greek word “dry”
- Gardening and landscaping for a dry climate using plants native to the area that need less water, and are suited to the soil
- Working with the climate, not against it

### Germinate

- When a seed begins to grow after a period of dormancy

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## Seed Bomb Recipe 1: Crayola Clay & Soil

**Materials:** Crayola Clay  
Potting Soil  
Native Flower Seeds (ex. Gaillardia/brown-eyed Susan, Yellow Aster)  
Mixing bowl  
Gloves (gardening or other)  
Newspaper or washable table cloth if working on a table

### Instructions:

- Scoop a small ball of clay (approximately 1 tablespoon) out of the clay container and place in mixing bowl
- Add the same amount of potting soil to the bowl and begin mixing or squishing the soil and clay together with your fingers
- Make a well in the center of the clay and soil mix, and drop in 8-10 flower seeds (not all the seeds will germinate)
- Squish the clay and soil mixture together over the top of the seeds, protecting them a little before squishing everything one more time
- Form a ball shape out of the squished mixture, making sure no seeds were lost
- Roll the ball in more soil, then set aside to dry for several hours

To plant: Wait until the weather calls for rain, and place ball where you want the flowers to bloom, barely covering the top with soil.

### RECIPE ADAPTATION:

Instead of using Crayola clay, you can use **natural clay** if you have any available where you live, or **clay powder**. For clay powder, add small amounts of water until the clay and soil mixture starts to stick together, then proceed with making a well for seeds.

**NOTE:** If you are using clay powder, plant and water your seed bombs as soon as possible. The water in the seed ball will likely start the germination process.

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## Seed Bomb Recipe 2: Paper Mulch\*

\*This method requires adult supervision and assistance for the operation of a blender. If you use your kitchen blender make sure to wash it out after making paper pulp.

### *Why paper?*

Using a blender and water, we use mechanical energy to free up the wood pulp in the paper. Then, after straining out excess water, we can shape the pulp into small balls to put the seeds in. This pulp can also be reused to make a new sheet of paper, too!

Source: <https://www.youtube.com/watch?v=uEXKV3Ws8WY>

### **Materials:** Blender

3 sheets recycled paper (newspaper, construction paper)

Native flower seeds

Strainer

2 cups water

Mixing bowl (to catch water)

Newspaper or washable table cloth if working on a table

Optional: tissue paper

### **Instructions:**

- Pour two cups of water into your blender
- Tear up 3 sheets of paper (does not have to be exact) into the top of the blender, CAREFULLY pressing it down into the water as you go
- Place the lid onto the blender and blend on a medium level until the paper has become fine pieces
- If blender is having difficulties: add more water
- Pour the contents of the blender into a strainer that is placed inside of your mixing bowl (or a sink)
- Press your fingers into the mushy pulp to push out water
- Leave enough water that you can still shape the pulp into a ball
- Take a pinch of seeds, and press the pulp ball into them, mixing everything together
- Set aside to dry
- **Optional:** wrap 1 layer of tissue paper around the seed ball to colour-code your different seeds

**No blender method 1:** place water and paper shreds into a plastic bag and mash together by hand

**No blender method 2:** Use a potato masher or pastry cutter in a bowl

**To Plant:** Same as Recipe 1

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## Resources

### Websites:

Make Water Work: <https://www.makewaterwork.ca/plants/>

Okanagan Xeriscape Association: <http://okanaganxeriscape.org/>

Ministry of Agriculture and Lands Field Guide to Noxious Weeds and Other Selected Invasive Plants: [https://bcinvasives.ca/documents/Field\\_Guide\\_to\\_Noxious\\_Weeds\\_Final\\_WEB\\_09-25-2014.pdf](https://bcinvasives.ca/documents/Field_Guide_to_Noxious_Weeds_Final_WEB_09-25-2014.pdf)

Invasive Species Council of BC: <https://bcinvasives.ca/>

### Books from the Catalogue

- *The Gardening Book* by Jane Bull
- *Let's Get Gardening: 30 easy gardening projects for children* from DK Books
- *How Does My Garden Grow?* from DK Publishing
- *Outdoor Crafts: Lots of fun things to make and do outside* from DK Publishing



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Created by L.H.