



# SOAK A BEAN AND PAINT ROCKS

Grades K-8



## SOAK A BEAN IN WATER

**K-8:** Students get to soak beans in water for an hour, and measure how they change in size. Then, they will get to paint rocks for their very own rock garden!

### HALLO!

5 min

#### Hallo is Dutch for hello! (Pronounced HAAL-oo)

Greet your students. Be friendly. Use their name, ask a question, give a high five, or thumbs-up! Take roll. Mark down which students took a snack and tally the snacks given out.

### SNACK / FREEPLAY

30 min

#### Enjoy free play:

Students enjoy playing outside and eating their snacks.

### STORY TIME

15 min

#### Read the story:

Read to your students outside as they sit in a circle. Older students may choose to read their own books during this time.

### STEM TIME

50 min

#### K-8: Soak beans, and paint rocks

Today the students will get to do two activities! First, they will experiment with beans. During the time that the beans are soaking, the students can get creative and paint rocks. When the rocks are dry, the students can take their rocks outside and find an area, perhaps in their garden, to create a rock garden. Throughout the month encourage the students to add to the rock garden and watch it grow!

### Materials:

- Beans (pinto beans or other type of seed)
- Water
- Tedros test tubes
- Toby tweezers
- Mezzie measuring tape
- Pippi pipette
- Napkins or paper towels
- Paper cups

#### K-8 Soak a bean Instructions:

**Say:** "Today we will be observing the first step in the growth of a seed."

1. Give each student 5 beans. Students will measure the length and width of their dry beans.
2. Students will put their beans into a Tedros test tube filled with water.
3. Wait for about an hour or more. During this time, the student will get to paint rocks for a rock garden!
4. Next, the students will get to prepare their beans to see how well they sprout! Have each student use Toby tweezers to place the beans on a napkin.
5. Students measure and record the length and width of the wet beans.
6. Then, students will wet their napkin and beans with Pippi pipette, roll the wet napkins with seeds in it, and place it in a paper cup. Have the students write their name on their cups, and put them near a window. **The napkins must be kept moist as you wait for the beans to sprout over the next week. Putting some water in the bottom of the cups, with the napkin keeping the seeds from being submerged, can keep the seeds wet if you will be out of the classroom for multiple days.**

**Ask:** "How did your bean change when you soaked it in water? Does the size of the seed grow, shrink, or stay the same? Is the skin of the seed wrinkled or smooth? Do you think it will continue to change now that it's dry again?"



**Materials:**

- River rocks
- Paint brushes
- Acrylic paint
- Paper plates
- Disposable cups of water
- Paper towels

**K-8 Rock painting instructions:**

Say: "Throughout Plant Life Month we will be creating our very own rock garden! Today we will get to paint rocks! Feel free to decorate them with fun designs, uplifting words or quotes, and with things that you love! We will get to paint rocks later in the month as well, but you are welcome to add to the rock garden any time, if you would like to paint a rock in your free time."

1. Set up the supplies at the tables where the students will be painting. They will need river rocks, acrylic paint squeezed onto paper plates, paint brushes, water cups for the brushes, and paper towels. The students can share paint, so you may want to set out a paper plate of paint for every 2 to 3 students, or one per table. Use your best judgement for this activity.
2. Show pictures to the students to give them an idea of all the possibilities with rock painting.
3. Encourage the students to take a few minutes to brainstorm. Some ideas could include: lady bugs, butterflies, frogs, a starry sky, beach, trees, basketball, football, etc.
4. Each student can start with 1 river rock, but allow them to paint another rock if they want to continue painting after they finish their first rock.
5. The students may want to start with a thin base coat, and give the rocks a little time to dry before painting their designs.
6. Tips- Use the end of a paintbrush to make dots or circles. Use a tiny, thin, brushes with short bristles to paint words or quotes. Smaller brushes provide greater control when painting details.

**SPORTS / GAMES**

25 min

\*Older students may practice their sport if they don't want to play the game.

**Materials:**

- \*Optional- Music

**The Bean Game**

Instruction- Have the students jog around the playground. When they hear the name of a different type of bean, they will do the associated action. Once everyone has performed the action for 5-10 seconds, then have them continue running.

- Runner bean - run in place
- French bean - stop and say 'Bonjour!'
- Jumping bean - jump around the space
- String bean - reach up to the sky
- Jelly bean – wobble like jelly
- Baked bean – squat and curl up into a round shape
- Chili bean - shiver like its cold

**Instructions:**

Allow your students some homework time. If they need help let them know you can help them. If they do not have any homework they can have some reading time, or they can have free time to go outside and play.

**Clean up/pack up/dismissal**

Clean up, pack up and head home.

**HOMEWORK / FREE PLAY**

20 min

**CLEAN UP / DISMISSAL**