# 

Soybeans are everywhere!







#### Soybean seed necklace

Do you know what a seed needs to germinate and grow?

#### **Supplies**

- 2–3 soybeans per student
- 1 2" × 3" bag per student
- 1 cotton ball per student
- Scissors
- Yarn
- Ruler
- Hole punch
- Plastic cup full of water
- Pipettes/dropper

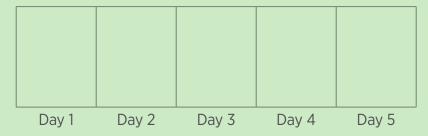


## Water Sun (after germination) SOIL HEAT

#### **Directions**

- 1. Place a cotton ball in a small plastic bag.
- 2. Add one or two soybeans.
- 3. Use the pipette/dropper to dampen the cotton ball. Too much water will cause the seed to rot.
- 4. Seal the bag. Punch a hole at the top.
- 5. Cut a piece of yarn long enough to fit around your neck like a necklace. Put the seed necklace inside your clothes—seeds need warmth to grow. (Alternative idea: safety pin the bag inside clothing.)
- 6. Take good care of your seed necklace it is fragile!

Watch your soybean seed germinate; it will begin to grow roots, stems and leaves within three to five days. Chart your soybean's growth; draw a picture each day.



#### Idea

- Give your seed a name like "Sam Soybean."
- Plant your soybean in soil after it germinates.
   Keep the soil damp and place in a sunny window or under a grow light and watch it grow.





#### **Bean buddy**

#### Need a friend? Design your very own buddy!

#### **Supplies**

#### • Soybeans

Dental floss

• Scissors

• Sock or glove

 Assorted decorations: yarn, feathers, plastic eyes, felt, curly

• Glue gun

ribbon, etc.

#### **Directions**

Use dental floss to tie the tube sock into 2–3 sections (soybean caterpillar) or fill the sock halfway and tie off the top (sock sits flat with a "pony tail" sticking up or

lies flat with a "tail" behind). Fill a glove with soybeans to make spider-type Bean Buddy.

#### Ideas

Give your bean buddy a name.

Create a menagerie of many buddies.



#### Soybean stress balls

#### Under stress? Squeeze some beans and make a stress ball.

#### **Supplies**

- Soybeans
- Dental floss
- Scissors
- Sock or glove
- Assorted decorations: yarn, feathers, plastic eyes, felt, curly ribbon, etc.
- Glue gun

#### **Directions**

Fill 3–4 large bowls with soybeans and many students can work together at the same time. Hold the balloon neck open and "feed" the soybeans into it. Kids might need help tying the balloon full of beans. Hint: It does not help to blow up the balloon first!

#### Ideas

Keep a stress ball in your jacket pocket and squeeze it when needed. Give a stress ball to someone who needs it—maybe your mom or dad!

#### **Ohio drum**

#### Feel the beat? Make music with an Ohio bean.

#### **Supplies**

- 9 inch balloon
- Soybeans
- Plastic cups Scissors

#### **Directions**

- 1. Cut the neck off the balloon.
- 2. Put 3–5 beans in plastic cup.
- 3. Stretch balloon over mouth of cup.

#### Ideas

How many ways can you make music with your Ohio drum? Organize an Ohio drum corps.







## SORT IT OUT!

### Did you know that beans are seeds? Seeds grow into plants that produce the beans we eat! Do you eat these beans/seeds?

How many seeds do you think are in your cup?

We think there are \_\_\_\_\_ seeds.

Sort your seeds into groups. Count each group.

Add all the seed groups together. We count \_\_\_\_\_ seeds in all.

Record this information on your Seed Graph.

#### **Directions**

Students work in pairs to complete the activies on the four worksheets.

#### **Materials pair of students**

- ½ cup assorted seeds (soybean, lima, corn, pinto, black-eyed, kidney)
- Pencil
- 1 of each seed sort worksheets

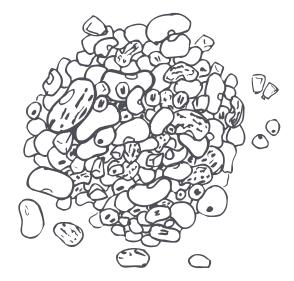




Kidney: \_\_\_\_



Blackeye: \_\_\_\_



Soybean: \_\_\_\_

Put all your seeds here in the center, then sort them into the smaller areas.



Pinto: \_\_\_\_



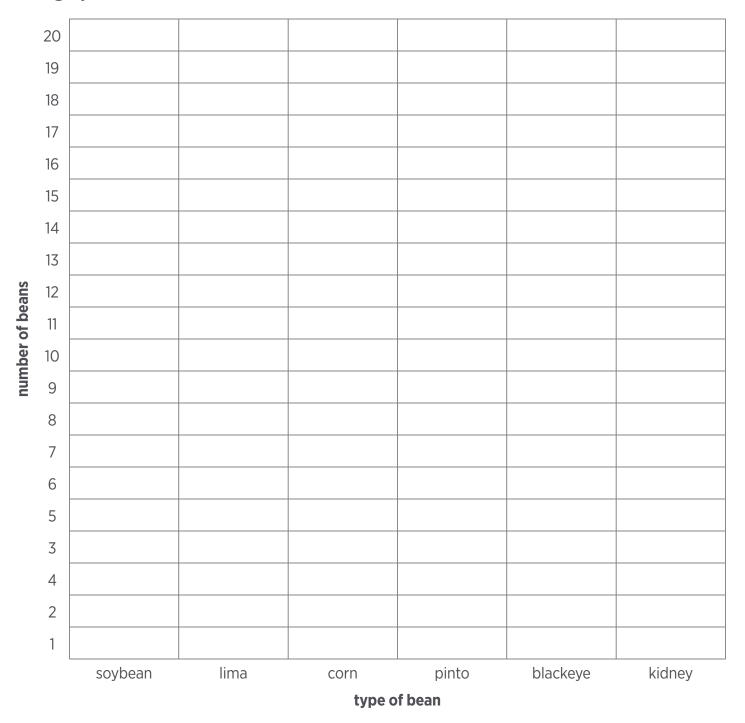
Corn: \_\_\_\_





## CHART IT OUT!

#### Seed graph

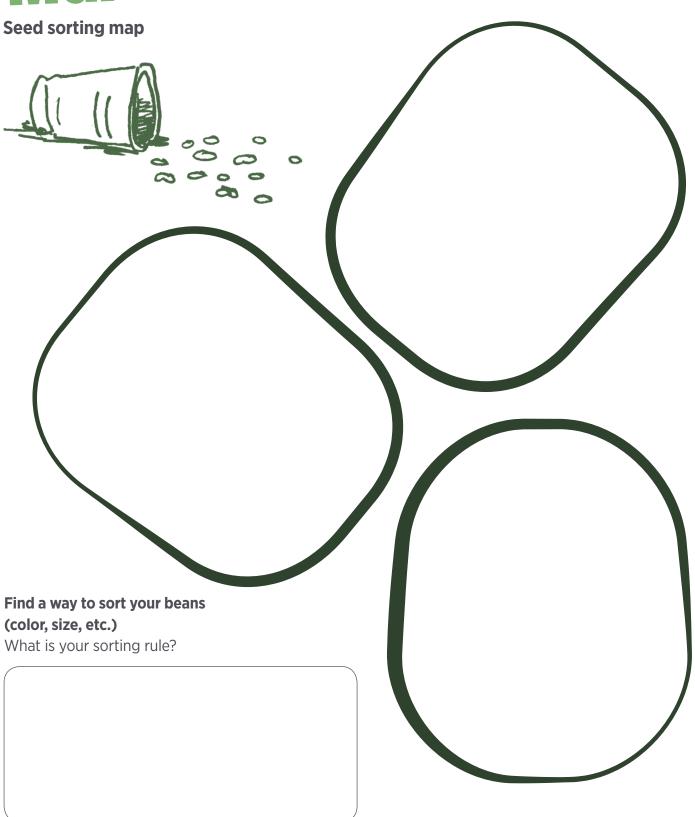


What does this graph say?





## Map IT OUT!







## CHECK IT OUT!

#### **Observing seeds**

Look closely at your seeds. Name the colors that you see. Draw the shapes of the seeds.

	colors	shapes
Lima		
Soybean		
Corn		
Pinto		
Blackeye		
Kidney		
How many seeds	does it take to cover this line?	£ 23
1.41	alink Lagunt	(O)

	i tnink	i count
Lima		
Soybean		
Corn		
Pinto		
Blackeye		
Kidney		







#### Soy lip balm

#### Feel the beat? Make music with an Ohio bean.

#### **Supplies**

- 20 lip balm containers
- 1 cup of soy wax flakes
- 1/4 cup sweetened vegetable oil (4 stevia packets in a 32 oz bottle of oil)
- Shaved soy crayons (for color)
- Shaved cocoa butter (for extra moisturizina)
- Hot plate
- Hot pad
- Glass beaker
- Stir sticks

#### **Directions**

- 1. Heat the soy wax and sweetened vegetable oil on a hot plate, until melted. (You can use candle warmers to keep liquid while students make their lip balm.)
- 2. Allow students to add a pinch of shaved Prang crayons and a pinch of cocoa butter shavings. Fill tubes about half full with melted material. Let cool for 10-15 minutes until solid.





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