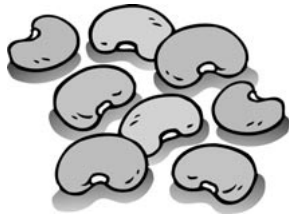


Germinating Seeds

WHAT YOU NEED



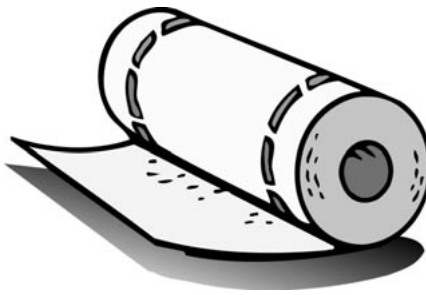
bean seeds



plastic knife



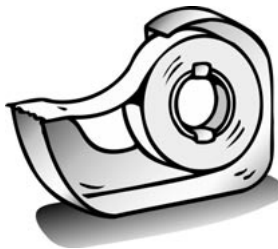
hand lens



paper towels



water



tape



black marker

Find Out

Do this activity to see what seeds need to germinate.

Process Skills

Observing
Predicting
Communicating

Time

- 35 minutes to get started
- 5–10 minutes every day for two weeks



WHAT TO DO

1. Soak your bean seeds.
2. Split the seeds apart.
3. **Observe** the inside of the seeds with the hand lens. Find a half that has an embryo. Find a half that has a food supply.
4. Place several halves with the embryo and the food supply on a wet paper towel. Label them A.
5. Place several halves with the food supply, but without the embryo, on another wet paper towel. Label them B.
6. Place the paper towels in a sunny place.
7. Based on what you have learned about seeds, **predict** which seeds will germinate.
8. **Observe** your seeds every day.
9. **Record** your observations on the chart.



Circle *YES* if the seeds germinated.
Circle *NO* if the seeds did not germinate.

Seeds A	Seeds B
<p data-bbox="592 567 682 609">YES</p> <p data-bbox="600 787 673 829">NO</p>	<p data-bbox="1031 567 1120 609">YES</p> <p data-bbox="1039 787 1112 829">NO</p>

Conclusions

1. Which seeds germinated?

2. Why did some seeds germinate and other seeds not germinate?

New Questions

1. Would all of the seeds germinate if they were placed in soil instead of on a paper towel?

2. Write a new question you have about how plants grow.



Name _____



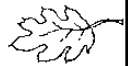
ACTIVITY

Investigating Leaves

Draw a picture of how the leaf looked on Day One and Day Two.

Day One

Day Two



Name _____

What Happened

① How did your leaf change?

② Why do you think that your leaf changed?

What If

Predict what would happen if you did this activity with a flower.

Name _____



ACTIVITY

Observing Bean Seeds

Draw what you see inside the seed.



Draw a picture that shows how a seed germinates.



Name _____

What Happened

① What did the inside of the seed look like?

② What do you think was in the seed around the embryo?

What If

Predict what would happen if you planted half of a seed.

Name _____



ACTIVITY

Observing Leaves

Draw what you see through the hand lens.




Write how long the leaves are.

Write how wide they are.


How long? _____

How wide? _____




How long? _____

How wide? _____




How long? _____

How wide? _____



How long? _____

How wide? _____



Name _____

What Happened

① What were the differences in size of the leaves you collected?

② How many different shapes of leaves did you find?

What If

What other plant parts could you measure and compare?
