

SCIENCE EXPERIMENT

SEED GERMINATION

IN A ZIPLOCK BAG

Observe • Explore • Learn



 Name : _____

 Class : _____

 Date : _____

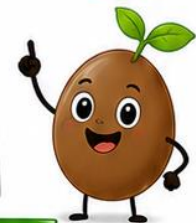
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SEED GERMINATION IN A BAG

Watch a tiny seed sprout and grow into a plant!



Life starts small!



MATERIALS YOU NEED



Seeds
(beans work best)

Paper Towel

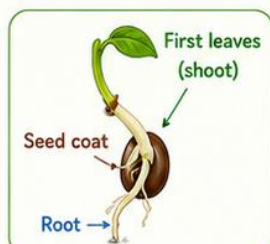
Resealable Plastic Bag

Water

Optional: Tape, Marker

THE SCIENCE BEHIND IT!

Seeds have everything they need to grow a new plant. When they get water, they soften and start to grow. First the root grows down, then the shoot grows up toward the light.



STEP-BY-STEP INSTRUCTIONS

- 1 Fold a paper towel and make it damp with water. It should be wet, but not dripping.
- 2 Place the seeds on the paper towel, spaced a few centimeters apart.
- 3 Gently fold the paper towel over the seeds.
- 4 Put the paper towel inside the plastic bag and seal it.
- 5 Tape the bag to a window or a sunny spot. Check daily!
- 6 Watch your seeds germinate and grow roots, shoots, and leaves!

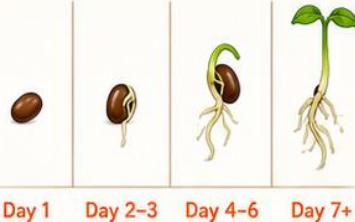
Keep the paper towel moist. Add a little water if it starts to dry out.

TIPS FOR SUCCESS

- ✓ Use fresh seeds for better results.
- ✓ Keep the bag in a warm place.
- ✓ Do not let the paper towel dry out.
- ✓ Give the plant light after it sprouts.



WHAT YOU'LL SEE



Day 1 Day 2-3 Day 4-6 Day 7+

RECORD YOUR OBSERVATIONS

Day	What I See	Root (Yes/No)	Shoot (Yes/No)	Notes / Drawing
1				
2				
3				
4				
5				
6				
7+				

SAFETY FIRST

- ✓ Always ask an adult for help.
- ✓ Do not eat the seeds.
- ✓ Wash your hands after the experiment.



DID YOU KNOW?

A tiny seed holds a baby plant inside it, along with food to help it grow!



SCIENCE IS ALL AROUND US!
KEEP EXPLORING, KEEP GROWING!





SCIENCE EXPERIMENT



SEED GERMINATION IN A ZIPLOCK BAG

PREDICTION SHEET



In this experiment, we will observe how seeds grow into seedlings inside a ziplock bag.

1 WHAT DO YOU THINK WILL HAPPEN?

Before we start the experiment, write what you think will happen to the seeds over the next few days.



2 MAKE A PREDICTION

Predict what you think will happen each day.



DAY	WHAT DO YOU THINK WILL HAPPEN?	DRAW YOUR PREDICTION
Day 1		
Day 2		
Day 3		
Day 4		
Day 5		
Day 6		
Day 7		

3 WHY DO YOU THINK THIS WILL HAPPEN?

Write the reason for your prediction.



Name : _____ Class : _____ Date : _____





SCIENCE EXPERIMENT



SEED GERMINATION IN A ZIPLOCK BAG

OBSERVATION SHEET



Observe your seeds each day and record what you see.
Draw and write your observations in the table below.

DAY	DATE	WHAT DO YOU OBSERVE? (Write your observations)	DRAW WHAT YOU SEE (Sketch your observations)
Day 1 	___/___/___	_____ _____	
Day 2 	___/___/___	_____ _____	
Day 3 	___/___/___	_____ _____	
Day 4 	___/___/___	_____ _____	
Day 5 	___/___/___	_____ _____	
Day 6 	___/___/___	_____ _____	
Day 7 	___/___/___	_____ _____	

EXTRA NOTES 

Name : _____ Class : _____ Date : _____



Name: _____

Class: _____

Date: _____

RESULT SHEET



SCIENCE EXPERIMENT



POTATO OSMOSIS EXPERIMENT



Purpose: To observe how different solutions affect a potato due to osmosis.

What we did:

We placed three potato sticks of the same size in different solutions and observed the changes over time.

**WATER****SALT WATER****SUGAR WATER**

1 RESULTS

Fill in the table with the final observations after 30 minutes.

Solution	Change in Size (Bigger / Smaller / No change)	Change in Texture (Firmer / Softer / No change)	Final Observation (Write what happened)
 WATER	_____	_____	_____
 SALT WATER	_____	_____	_____
 SUGAR WATER	_____	_____	_____

2 CONCLUSION

What did the results of your experiment show?



3 KEY TAKEAWAY

What did you learn from this experiment?



Great work!
You discovered the
power of osmosis!



Name: _____ Class: _____ Date: _____



REFLECTION SHEET

SCIENCE EXPERIMENT

POTATO OSMOSIS EXPERIMENT



Purpose: To observe how different solutions affect a potato due to osmosis.



WATER



SALT WATER



SUGAR WATER



Think about your experiment.

Use what you observed and learned to answer the questions below.

1 What did you learn from this experiment?



4 If you could do this experiment again, what would you do differently?



2 What surprised you the most? Why?



3 What was the hardest part of the experiment?



5 How can this experiment be useful in real life?



6 What new questions do you have after doing this experiment?



★ Overall Reflection ★



How did this experiment help you understand the concept of osmosis?



Great job, Scientist!

Keep observing, keep questioning, and keep exploring!