



Grades 1 - 3 Seed Sprouts

TEACHER RESOURCES

This is an enrichment activity to further demonstrate how plants grow and how easy it is to grow plants to eat at home.

This goes well with the “Bean In A Bag” and “Plant Parts 1 & 2” activities.



stock.adobe.com/ca/free

MATERIALS

- Good sprouting seeds (see page 2 for details) Mung beans are a good choice as they sprout quickly, grow very large and have a mild crunchy taste that children are likely to enjoy. These are the same sprouts often seen in oriental stir fry and in food stores as “bean sprouts”.
- Clean, quart-sized jar(s)
- 5x5” piece of window screening or cheesecloth for each jar
- Ring lid for a mason jar or a rubber band
- Measuring tablespoon
- Optional - bottled water
- Optional student journals sheets p.5-6

LOCATION

- Sprouting seeds does NOT require light. They are less bitter if they are kept in the dark. (Just cover them.)
- Seeds must have warm temperatures to grow so avoid cold areas.

PROCEDURE

See page 2 for details.

- Mung beans work well in five days so you can start on a Monday and be finished by Friday. You can get a head start by soaking the seeds at home Sunday and bring them in to class Monday ready to go.
- Use the Science Journal on pages 5-6 so students can record what they see happen. You can simplify by observing each day but only recording every other day (M,W,F)
- On the last day, remove the bean sprouts from the jar, rinse and allow students to taste them.

SAFETY TIPS AND HINTS

It is VERY important to rinse the seeds twice a day to prevent bacteria/mould growth. **A chart is provided on page 4 to help keep track of this.** It is an easy task that students can help with.

ENRICHMENT - VARIATIONS

- Try some other seeds listed on page 2 to compare how quickly they grow and later how they taste.
- Use a smart phone or camera to record the seeds sprouting. Use good lighting and place a ruler next to the jar to show the change in level.

VIDEOS

Growing Broccoli Sprouts In A Jar Time Lapse - BoxLapse
<https://youtu.be/mrOSgazuJBM>

Plant Life Cycle of a Bean Seed - We Are Teachers
<https://www.youtube.com/watch?v=pg92cspLy0I>

What is a plant? - Free School (Grade 3-7)
<https://www.youtube.com/watch?v=qULkjDccCeY>

How Do Plants Grow? | CURIOUS QUESTIONS (Gr 2-3)
https://www.youtube.com/watch?v=i-eYGwOL_Uo

What Is Seed Germination? - Dr Binocs (vocab high)
https://www.youtube.com/watch?v=JSe_VUMym-jo&list=PLmJ33rwb1zZYj7vMjW7byQGRaaZKz6vB-G&index=28&t=154s



Greenplanet Energy Analytics

Seed Sprouts **TEACHER RESOURCES**

Below is a copy of the Sprouts in a Jar instructions (available on the 3NE.ca website Learning page).



Community Wellbeing



What you need:

- Good sprouting seeds (see info on back of this page)
- Clean, quart-sized jar
- 5x5" piece of window screening or cheesecloth
- Ring lid for a mason jar or a rubber band
- Measuring tablespoon
- Optional - bottled water

What to do:

1. Make sure everything is VERY CLEAN before you work with your sprouts (containers, counter, hands, etc.)
2. Measure 2 Tbsp of seeds into the jar and fill with three times the water needed to cover the seeds. Put the ring and screen (or cloth and rubber band) over the mouth of the jar and soak over night in a cool spot.
3. The following morning, remove any floating seeds and drain the water.
4. Fill the jar with three times the water needed to cover the seeds (cool water), swish the water around, drain ALL the water through the screen.
5. Place the jar upside down at an angle (to allow drainage) in a cool spot out of direct sunlight.
6. Repeat steps 4 & 5 at least twice daily (3 - 4 times is better) to prevent bacteria growth. Continue until the sprouts have grown to the size desired. Timing will vary based on seeds.
7. Remove them from the jar and dry using a salad spinner or paper towels.
8. Place in a plastic bag or sealed container in the refrigerator. Sprouts should stay fresh for up to a week.

WARNING: Never eat sprouts that do not appear or smell fresh.



WARNING:

Check the label to make sure you're purchasing whole and untreated seeds which are made for sprouting and eating. Sprouting seeds are all tested and verified to be free of dangerous bacteria or chemicals. Be sure to rinse the sprouts regularly to prevent bacterial growth that can be harmful.

Where To Buy:

Look at local stores or online for organic sprouting seeds. They should be reasonably priced and come in larger quantities than vegetable seed packets.

15 Easy To Grow Sprouts

- Alfalfa – mild, nutty 4 days
- Peas – crunchy, sweet. 4 days
- Lentils – earthy, slightly peppery 4 days
- Chickpeas – nutty, creamy. 4 days
- Mung Beans – mild, thick, crunchy . . 5 days
- Kale – mild, cabbage-like 6 days
- Red Clover - fine and mild 7 days
- Broccoli – super nutritious, mild. . . . 7 days
- Red Cabbage – colourful. 7 days
- Spinach – mild 10 days
- Mustard – fiery kick 10 days
- Beetroot – colorful, mild. 10 days
- Arugula – peppery 10 days
- Radish – punchy flavour, crunchy . . . 14 days
- Basil – sweet, intense, Mediterranean 14 days

10 Ways To Enjoy Your Sprouts:

- Sprinkle on tossed salads
- As a substitute for celery in tuna salad
- Mix into mashed potatoes or potato salads
- Garnish on pasta dishes
- Add to stir-fry dishes
- Garnish on sandwiches or scrambled eggs
- Blend into veggie smoothies
- As crunchy toppings for soup, right before serving
- Sauté with onions and beans
- Eat raw as on-the-go snacks



Use your smart phone to see a Sprouting Video



WHAT TO DO WITH MUNG BEANS

This nutritious, crunchy vegetable is great in:

- Stir fries
- Salads
- Soups
- Stews
- Sandwiches
- Wraps
- Dumplings

There are many great recipes available on the Internet.

Bean Sprout Stir Fry -
Omnivore's Cookbook

<https://omnivorescookbook.com/bean-sprout-stir-fry/>



<https://omnivorescookbook.com/bean-sprout-stir-fry/>

Alberta Curriculum Connections

Gr.	Subject	Curriculum Connection	Detail
1	Science	Topic B: Seasonal Changes	-Identify and describe examples of plant and animal changes that occur on a seasonal basis
		Topic E: Needs of Animals and Plants	-Identify the requirements of plants to maintain life; i.e., air, light, suitable temperature, water, growing medium, space; and recognize that we must provide these for plants in our care. -Identify ways that land plants depend on soil.
1-3	Health	Nutrition	-Recognize the importance of basic, healthy, nutritional food choices to well-being.
2	Math	Shape And Space (Measurement)	-Relate the size of a unit of measure to the number of units used to measure length. -Compare and order objects by length. -Measure length to the nearest nonstandard unit.
	Math	Statistics And Probability (Data Analysis)	-Gather and record data -Construct and interpret concrete graphs and pictographs
3	Math	Shape And Space (Measurement)	-Relate the passage of time to common activities, using nonstandard and standard units (minutes, hours, days, weeks) -Demonstrate an understanding of measuring length (cm, m).

Sprout Rinsing Log

Sprouts are tasty, healthy and ready to eat in just 5 days!

It is VERY important to rinse the sprouts TWICE a day to prevent harmful bacteria growth.

1. Pour about 1 cup of cool water into the jar through the screen.
2. Swish the water around.
3. Drain ALL the water through the screen.
4. Place the jar upside down at an angle (to allow drainage) in a cool spot out of direct sunlight.
5. Sign the washing log below.



If any box is not signed, the sprouts may not be safe to eat.

Monday	Signed by	Time	Date
Morning			
Afternoon			

Tuesday	Signed by	Time	Date
Morning			
Afternoon			

Wednesday	Signed by	Time	Date
Morning			
Afternoon			

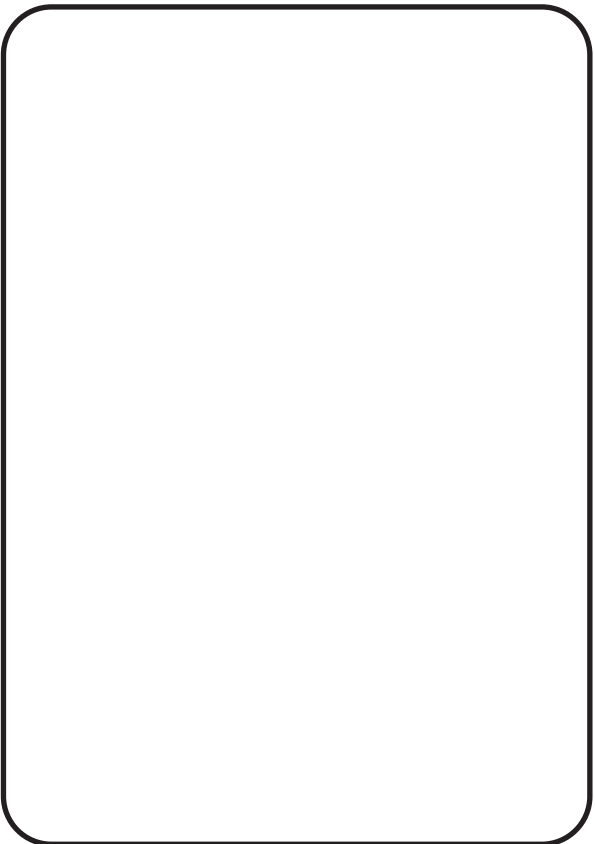
Thursday	Signed by	Time	Date
Morning			
Afternoon			

Friday	Signed by	Time	Date
Morning			
Afternoon			

Today's Date: _____

Name: _____

What did I see?

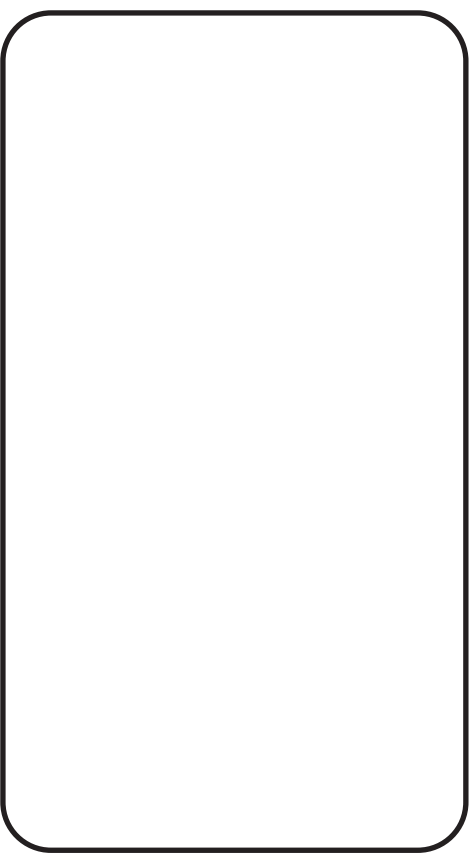


What is new today?

What did I measure?:

Science Journal

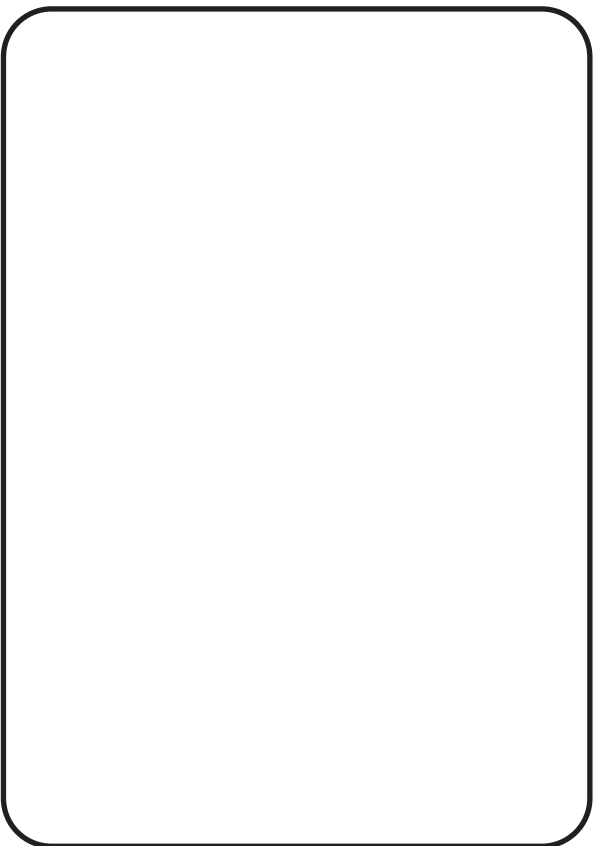
What I am studying:



The date I started:

Today's Date: _____

What did I see?

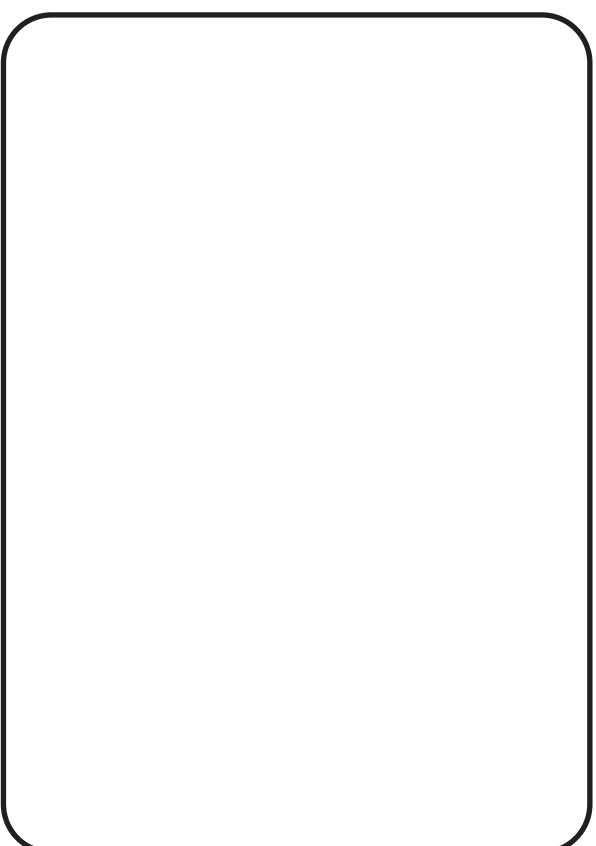


What is new today?

What did I measure?:

Today's Date: _____

What did I see?



What is new today?

What did I measure?:
