



THE SEED DETECTIVE



WELCOME to Agriculture in the Classroom Prince Edward Island (AITC-PEI) The Seed Detective.

Your mission is to help Detective Thumb identify the "Mystery Seeds".

This is a TOP SECRET investigation where you will discover the identity of your "Mystery Seeds" and help Detective Thumb complete this mission!

Follow these Mission Tasks carefully and you will solve the case of the "Mystery Seeds".

GOOD LUCK on your investigation!



AITC-PEI's The Seed Detective

Mission Task #1: Review your materials

Materials to complete this mission (included in this kit):

- 12 square evidence pots
- 2 fertilizer packs
- 12 plant markers
- Mini magnifying glasses
- “Mystery Seeds” envelope containing 6 Mystery Seed packs
- 1 bag of potting soil
- Top Secret Observation Log for each student
- “Answer Key” envelope (TOP SECRET: for end of mission)



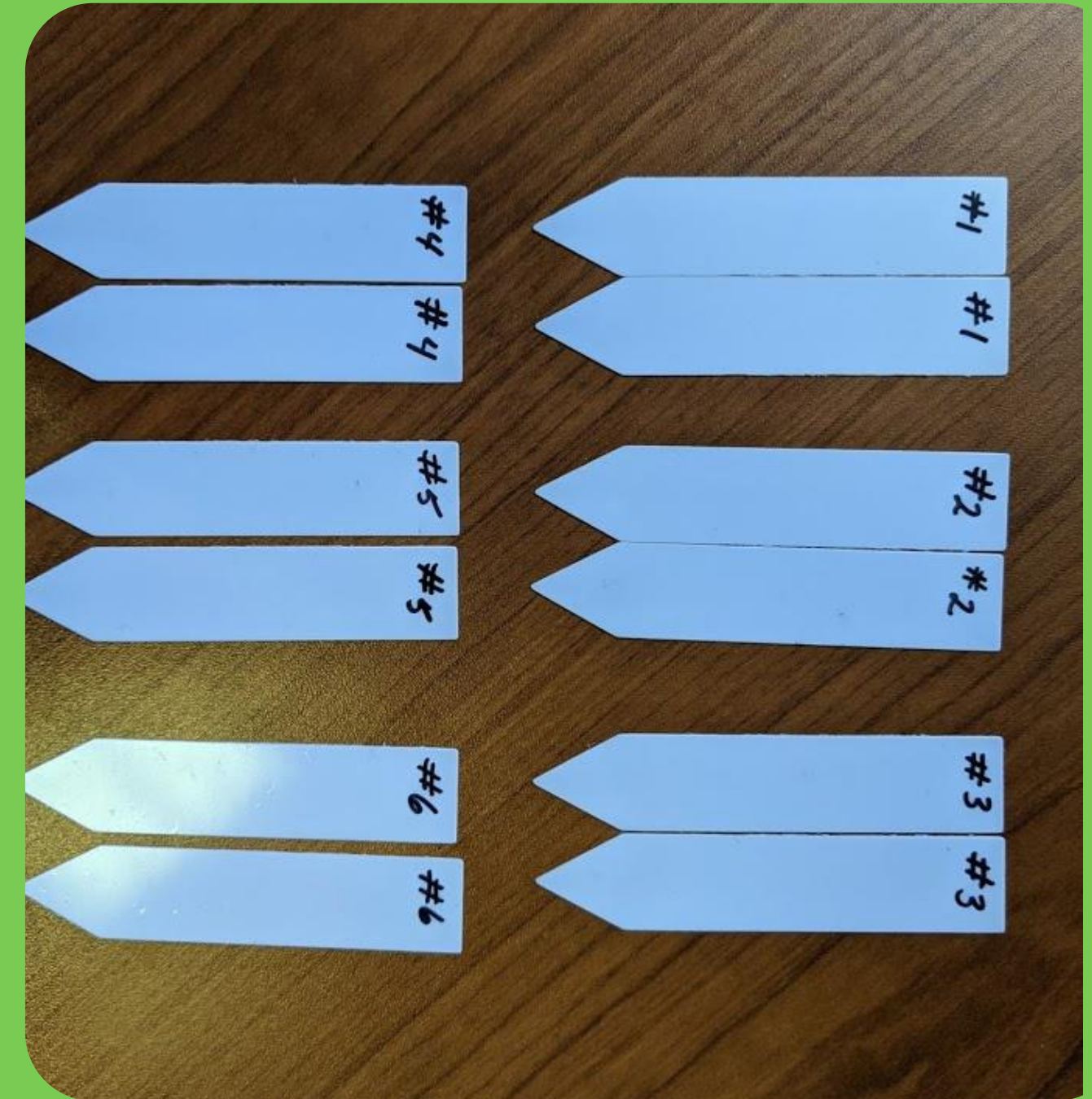
Mission Task #2: Open the "Mystery Seeds" envelope

- **There are 6 small envelopes of seeds numbered 1 to 6.**
- Students are encouraged to examine the seeds before planting them.



Mission Task #3: Label your plant markers

- **Take out your plant markers and number them as shown.**
- These plants markers will help you keep track your investigation.



Mission Task #4: Prepare your evidence pots

- **Lightly moisten the potting soil (in a separate container) before filling the evidence pots.**
- **Fill all 12 evidence pots with potting soil.**
- Place your numbered plant markers in the pots (Two #1s, Two #2s, Two #3s, Two #4s, Two #5s and Two #6s).
- Make **two** small holes about 2 centimeters deep in each pot for the mystery seeds.




OBSERVATIONS BEGIN: You will need your **Top-Secret Observation Log** to keep track of your evidence during your investigation.

Mission Task #5: Planting the Mystery Seeds

- **Plant numbered Mystery Seeds in their matching numbered evidence pots into the holes you've made (2 seeds per evidence pot).**
 - This step is VERY important to gather the evidence **to complete your mission.**





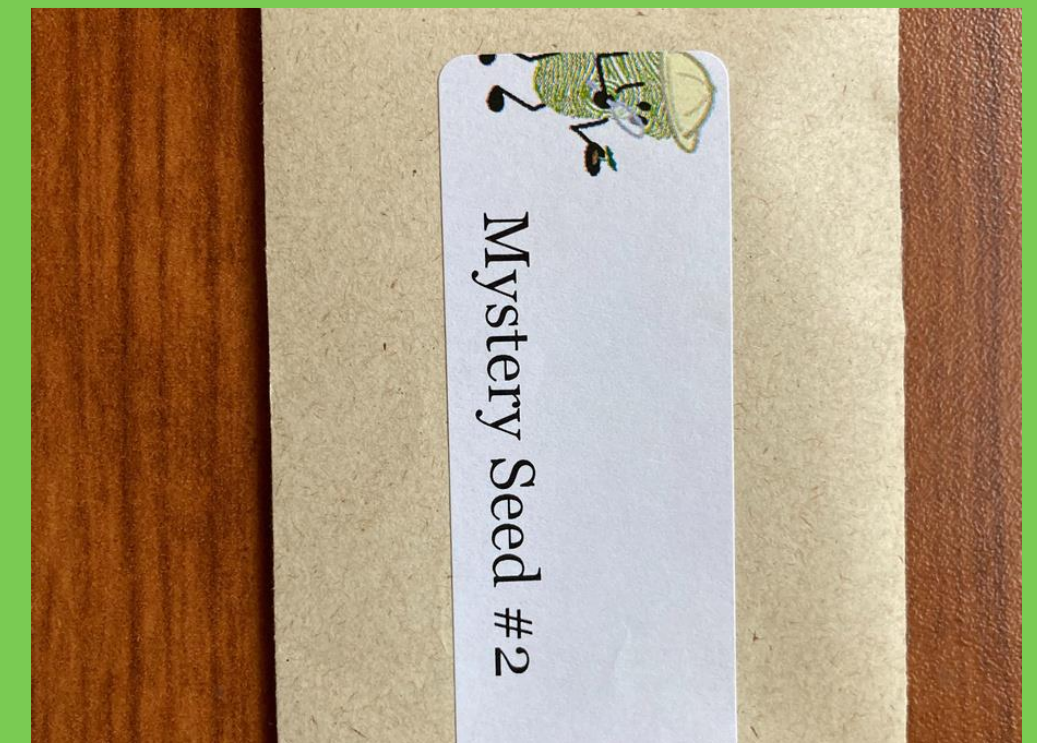
Detective Name: _____

TOP SECRET OBSERVATION LOG

Evidence Pot	Date Planted	Sprouting Date	Day 12 Height	Day 19 Height	Observation (shape, colour, smell, other)	Your Prediction
#1						
#2						
#3						
#4						
#5						
#6						

Mission Task #6: Cover the Mystery Seeds

- **Gently cover the Mystery Seeds with potting soil.**
- Be careful to match the Mystery Seed number with the pot number.



Mission Task #7: Protect the evidence (pots)

- **Place the pots in the plastic container that was provided in The Seed Detective Kit.**
 - This will keep your plants protected while you complete your mission.



Mission Task #8: Watering the evidence

- **Gently** water your Mystery Seeds.
- Water your Mystery Seeds a **little** each day that you are in school.



Mission Task #9: Keeping the evidence safe

- **Place your Mystery Seeds container near an electrical outlet for a lamp or near a window but in a warm place (away from cold drafts).**

Make sure the Mystery Seeds container is in a safe and secure place where they cannot be knocked over.



EXAMINATING THE EVIDENCE

Mission Task #10: What do the Mystery Seeds look like?

- **Your Mystery Seeds will start to sprout after 4 to 7 days.**
- Your first seeds may look like this:



Mission Task #11: Sprouting Mystery Seeds

- **Most of your Mystery Seeds should be sprouted by day 7.**
- Keep light on the seeds once your Mystery Seeds have sprouted.



Mission Task #12: What do you see?

- **Your Mystery Seeds should be growing well by day 12.**
- As the plants grow bigger, you may want to take the larger ones out of the plastic container, so they do not crowd the smaller plants.
 - Be careful not to move your plant marker



Mission Task #13: Fertilizer

- **Fertilizer contains important nutrients for plants.**
- To solve the case of the Mystery Seeds, you will now need to add the fertilizer to your water (as per instructions on fertilizer).



HELPING DETECTIVE THUMB IDENTIFY THE MYSTERY SEEDS

Mission Task #14: Begin to identify your Mystery Seeds

- **Your investigation is coming to an end around day 19-21 and you've gathered observations and evidence during your mission.**
- Using the evidence, you've gathered on your Top-Secret Observation Log; try to identify what plants you think your Mystery Seeds are!



Mission Task #15: FINAL TASK

- **Once you think you've identified all your Mystery Seeds, it's time to check.**
- Reveal the answers to your Mystery Seeds by opening the "Answer Key"!

CONGRATULATIONS YOU'VE SOLVED THE CASE AND HELPED DETECTIVE THUMB COMPLETE THE MISSION!





Thank you!



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Thank you to AITC-NS
for their Mystery Seed
Kit concept

