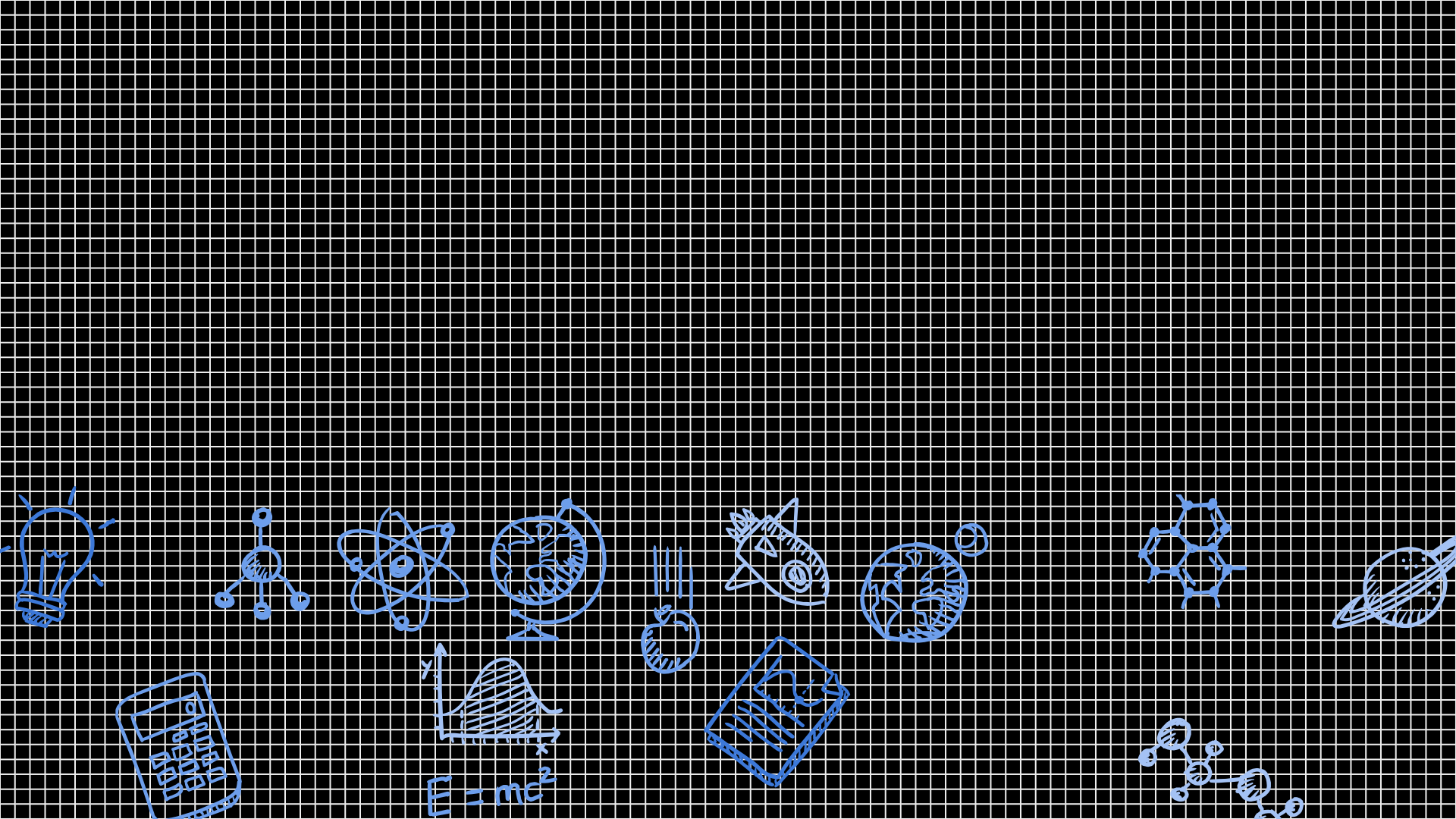

E = mc²

# Part 2 –

| | Empty container | Hydrogel + container |
|---|---|---|
| Trial 1 | | |
| Trial 2 | | |
| Trial 3 | | |
| Trial 4 | | |

Observations :

| | Empty container | Hydrogel + container |
|---|---|---|
| Trial 1 | | |
| Trial 2 | | |
| Trial 3 | | |
| Trial 4 | | |

Observations :

- firm
- rubbery
- easy to transfer
- visible bubbles inside

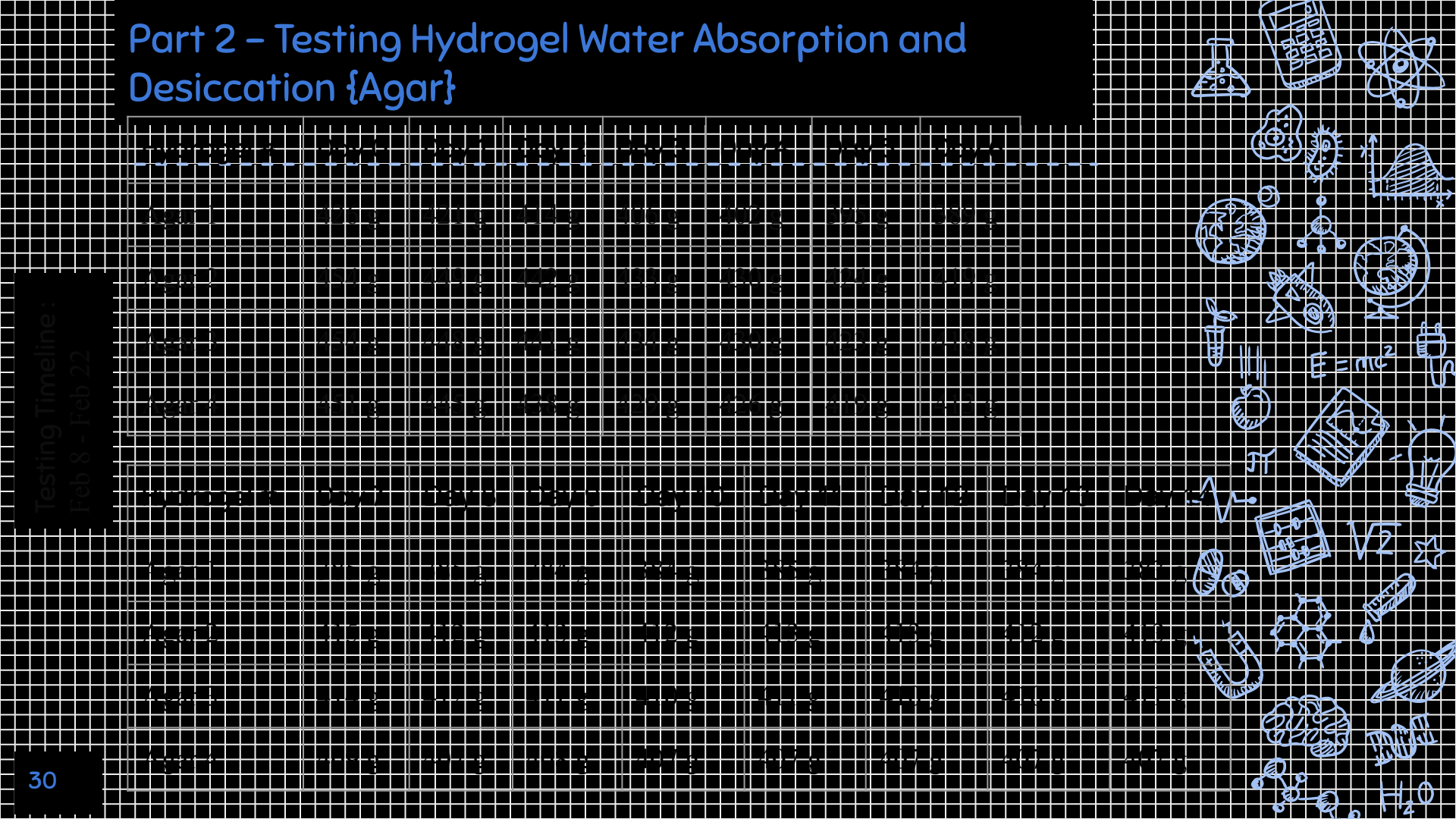
| | Empty container | Hydrogel + container |
|---|---|---|
| Trial 1 | | |
| Trial 2 | | |
| Trial 3 | | |
| Trial 4 | | |

Observations :

- squishy
- slightly difficult to transfer
- sticky

# Part 2 – Testing Hydrogel Water Absorption and Desiccation {Agar}

Testing Timeline:
Feb 8 – Feb 22

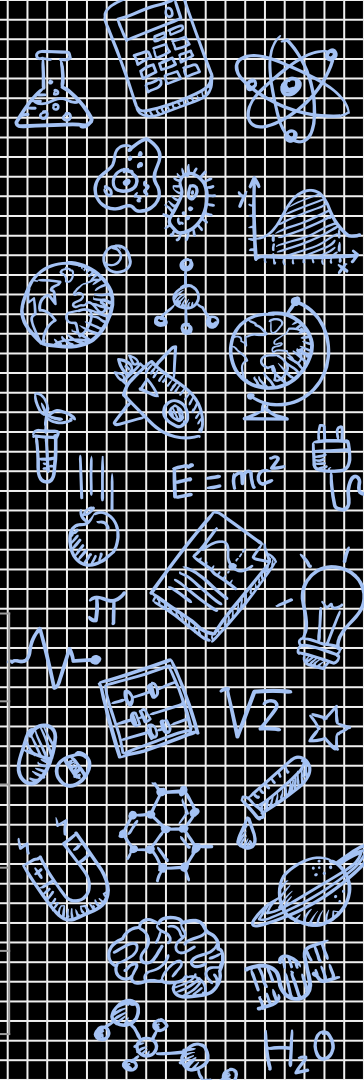


Hydrogels are soaked in water

Experiment 2 : Agar

# Part 2 – Testing Hydrogel Water Absorption and Desiccation {HEC}

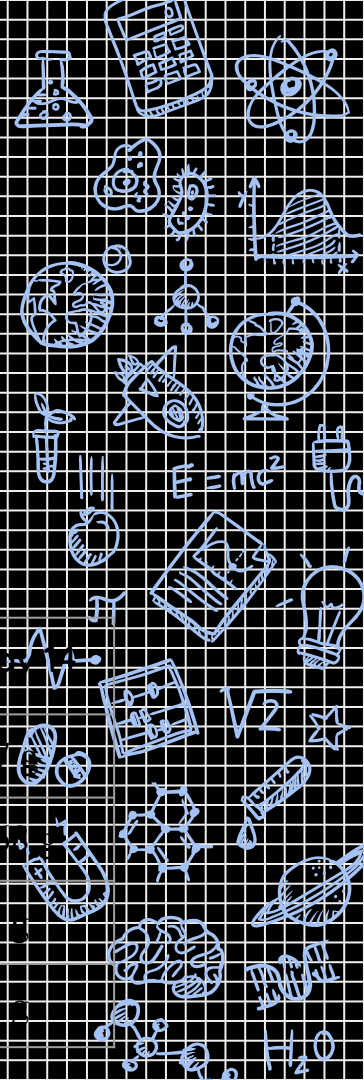
Testing Timeline:
Feb 8 – Feb 22



Hydrogels are soaked in water

# Part 2 – Testing Hydrogel Water Absorption and Desiccation {Agar + HEC}

Testing Timeline:
Feb 8 - Feb 22



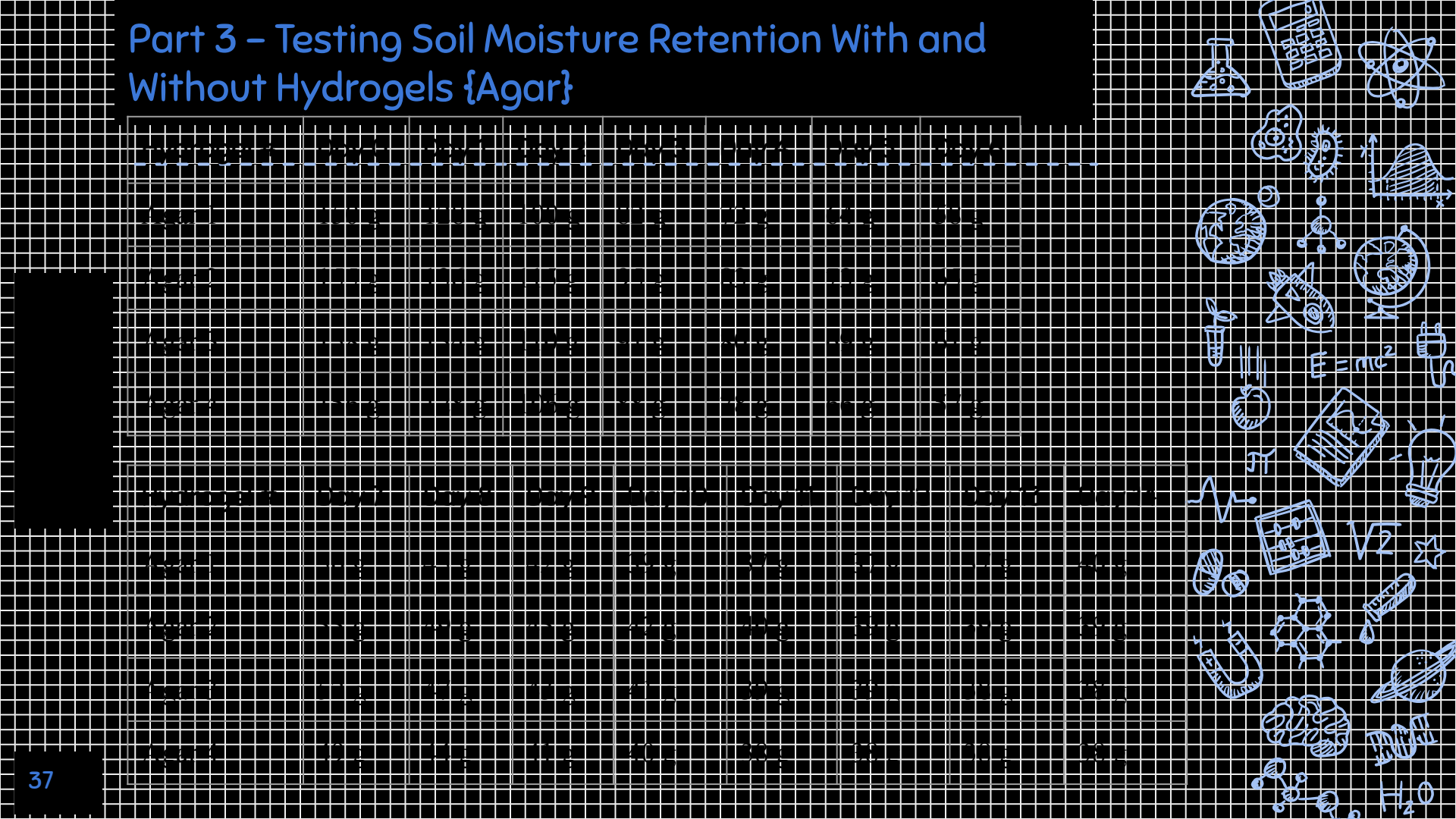
Hydrogels are soaked in water

Experiment 2 : Agar +HEC

# Part 2 – Observations

Testing Timeline :
Feb 8 - Feb 22

# Part 3 – Testing Soil Moisture Retention With and Without Hydrogels {Agar}

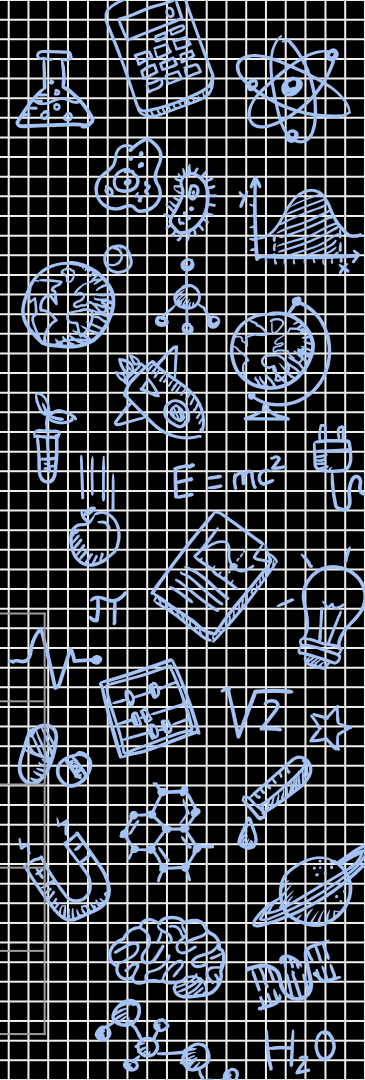


Starfrit
ZERO
25 g
MODE
Weight Poids
Milk Lait
Water Eau

Agar 4

# Part 3 – Testing Soil Moisture Retention With and Without Hydrogels {HEC}

Testing Timeline:
Feb 8 – Feb 22

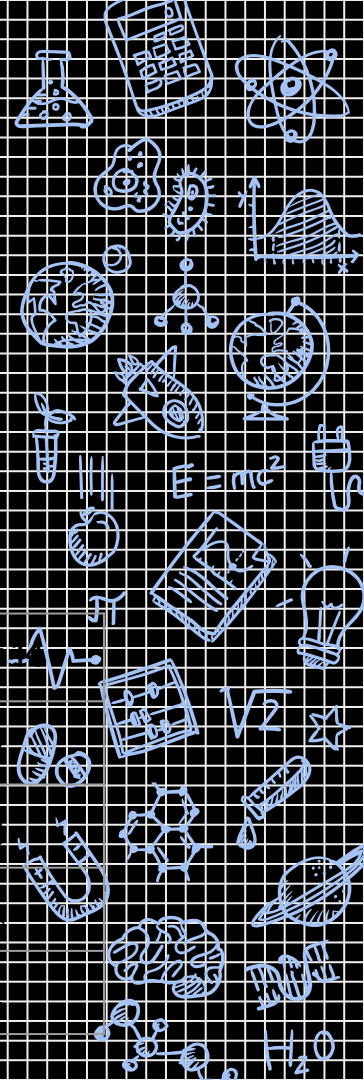


Starfrit
25 g
MODE
Weight
Poids
Milk
Lait
Water
Eau

HEC 4

# Part 3 – Testing Soil Moisture Retention With and Without Hydrogels {Agar + HEC}

Testing Timeline:
Feb 8 – Feb 22



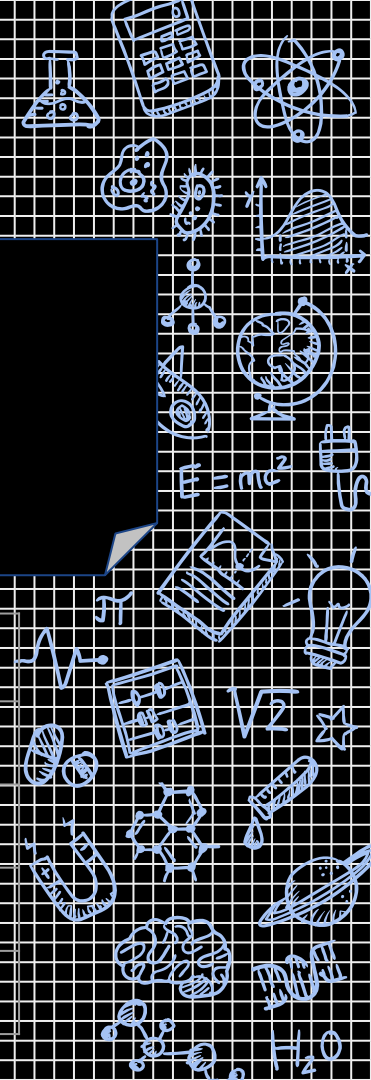
Hydrogel, (25 grams)

[redacted]

Experiment 3 : Agar + HEC

# Part 3 – Testing Soil Moisture Retention With and Without Hydrogels {Control}

Testing Timeline:
Feb 8 – Feb 22



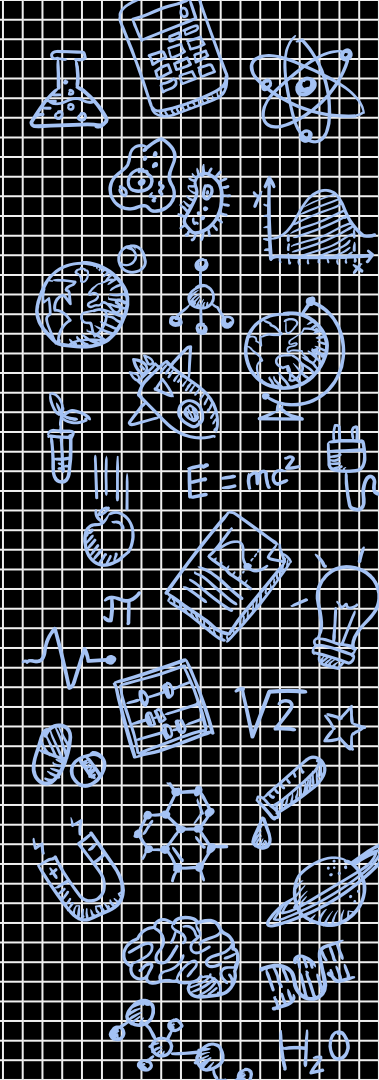
Experiment 3 : Control

# Part 3 – Observations

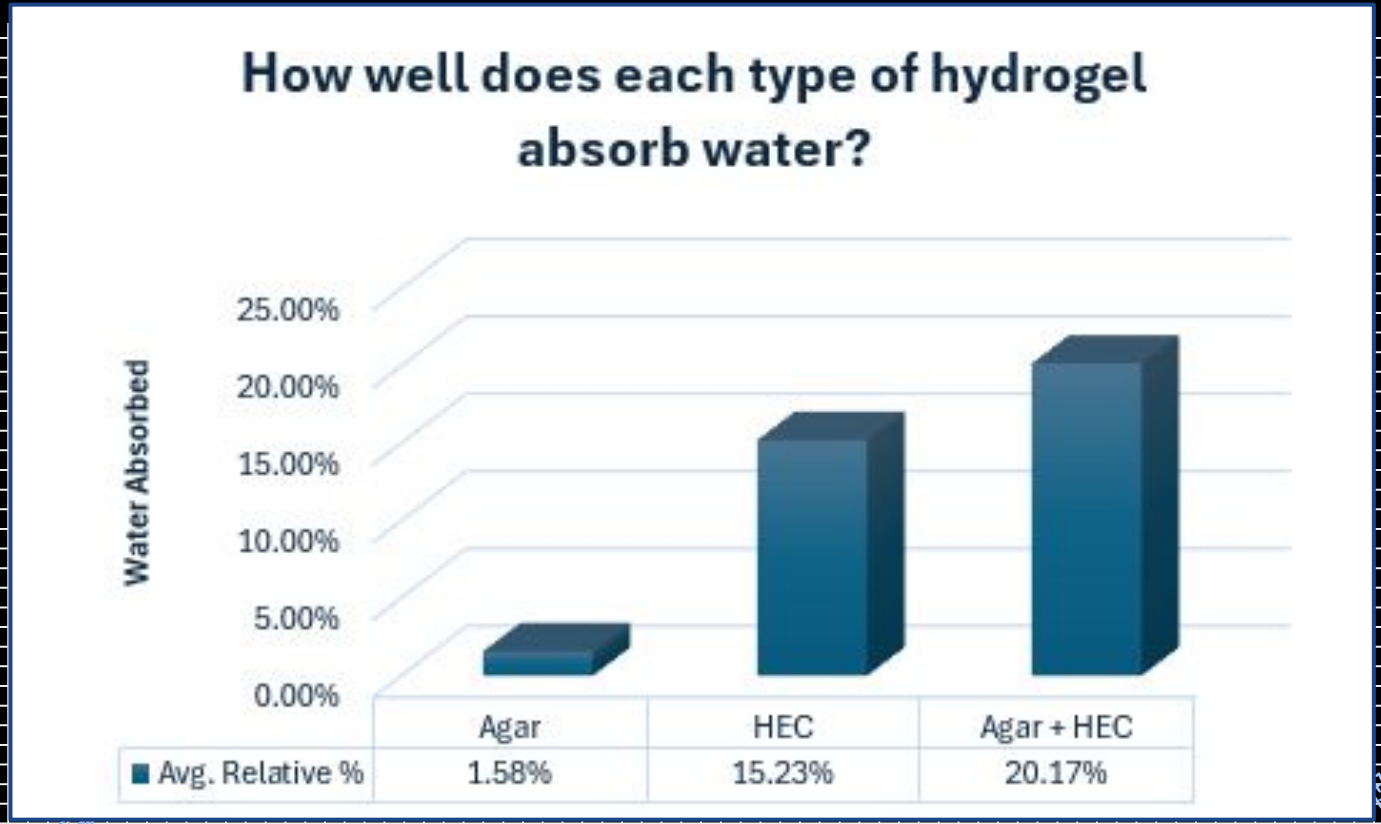
Testing Timeline :
Feb 8 - Feb 22

# Results

- How well does each type of hydrogel absorb water?
- How quickly does each type of hydrogel lose water to the air?
- How well does each type of hydrogel help conserve water in the soil?

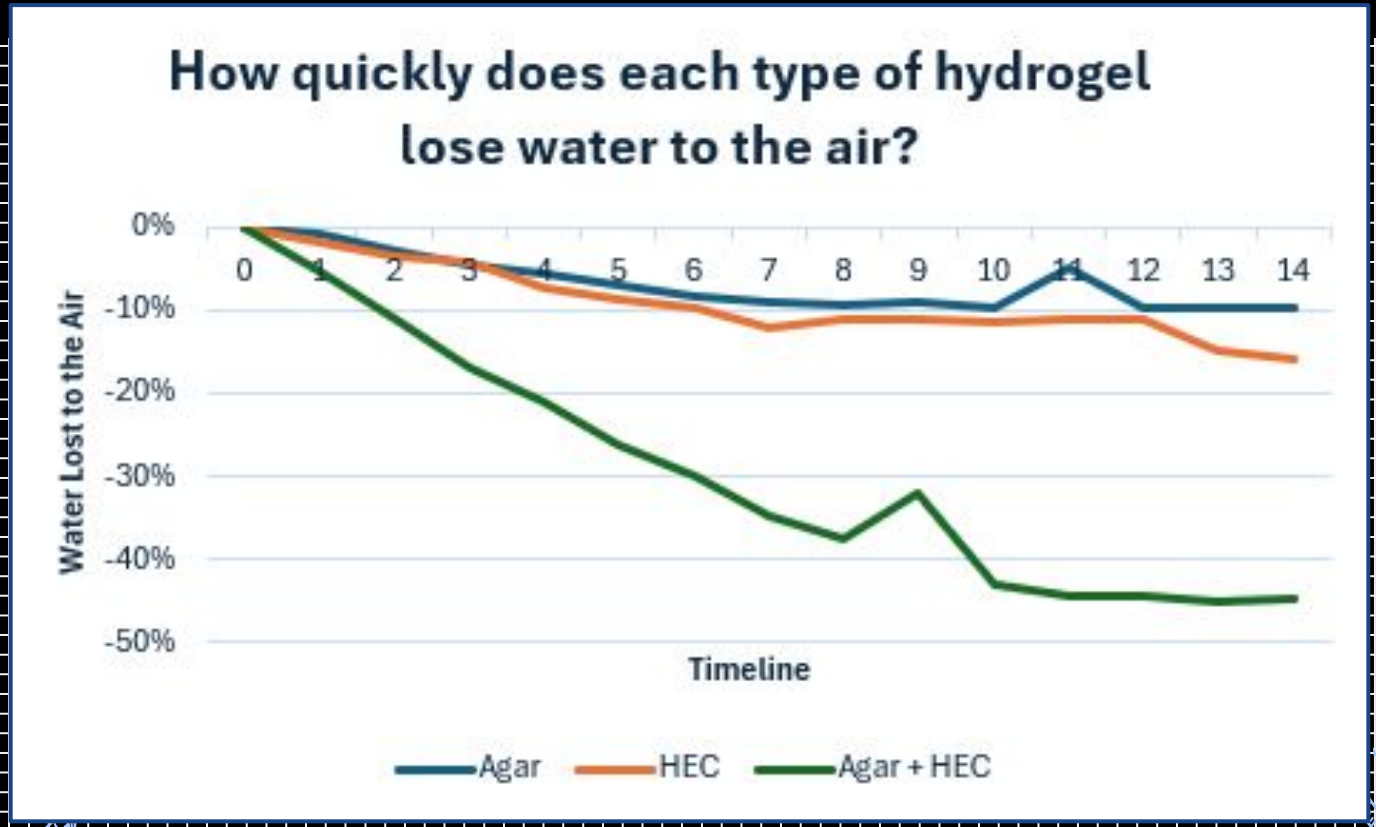


# Results


How well does each type of hydrogel absorb water?
Water Absorbed
25.00%
20.00%
15.00%
10.00%
5.00%
0.00%
Agar
HEC
Agar + HEC
Avg. Relative %
1.58%
15.23%
20.17%

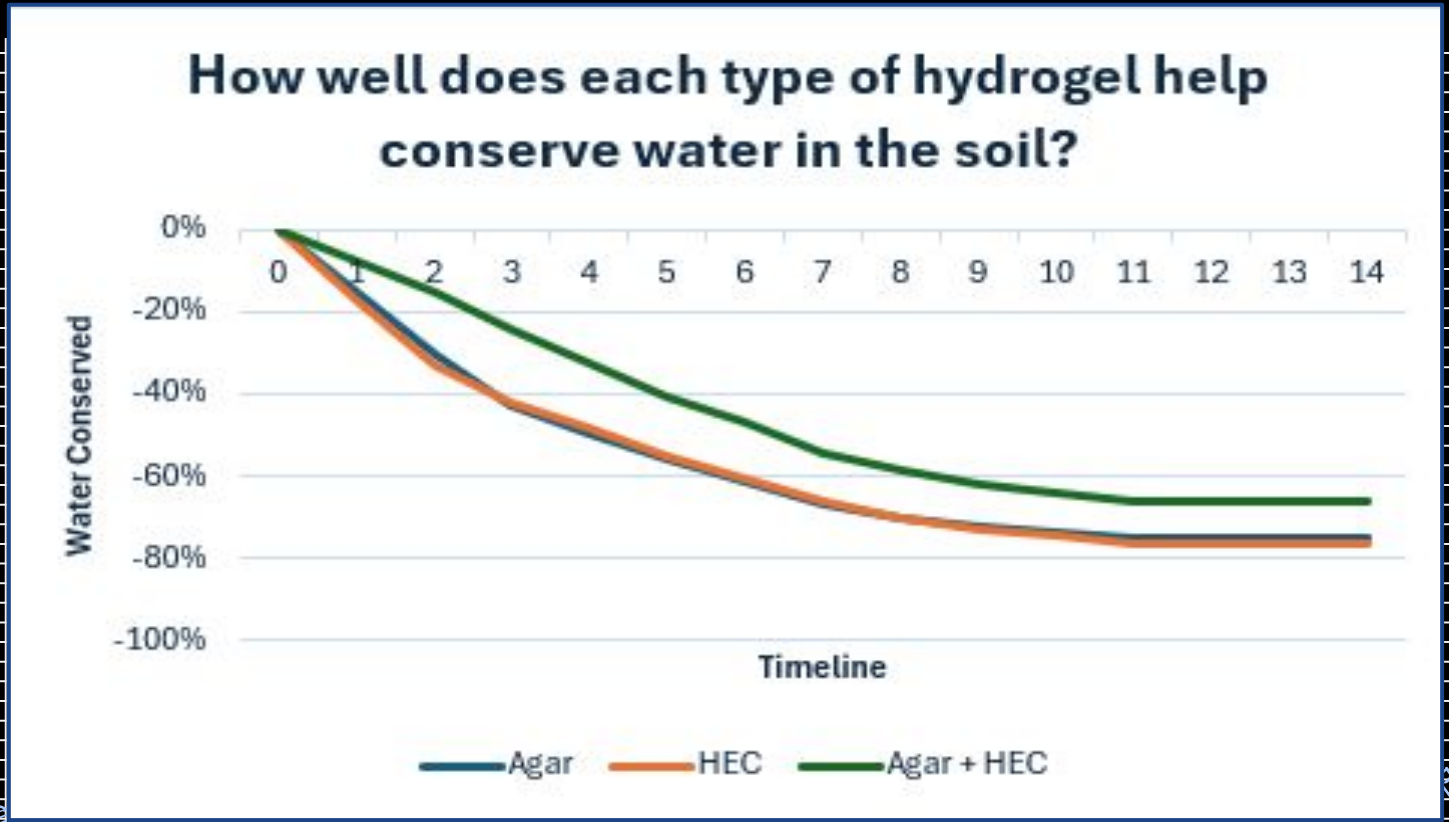
# How well does each type of hydrogel absorb water?

# Results


How quickly does each type of hydrogel lose water to the air?
Water Lost to the Air
0%
-10%
-20%
-30%
-40%
-50%
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
Timeline
Agar
HEC
Agar + HEC

# How quickly does each type of hydrogel lose water to the air?

# Results


How well does each type of hydrogel help conserve water in the soil?
Water Conserved
0%
-20%
-40%
-60%
-80%
-100%
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
Timeline
Agar
HEC
Agar + HEC

# How well does each type of hydrogel help conserve water in the soil?

# Conclusions

# Conclusions

# Sources of Errors

# Acknowledgements

# Citations - References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