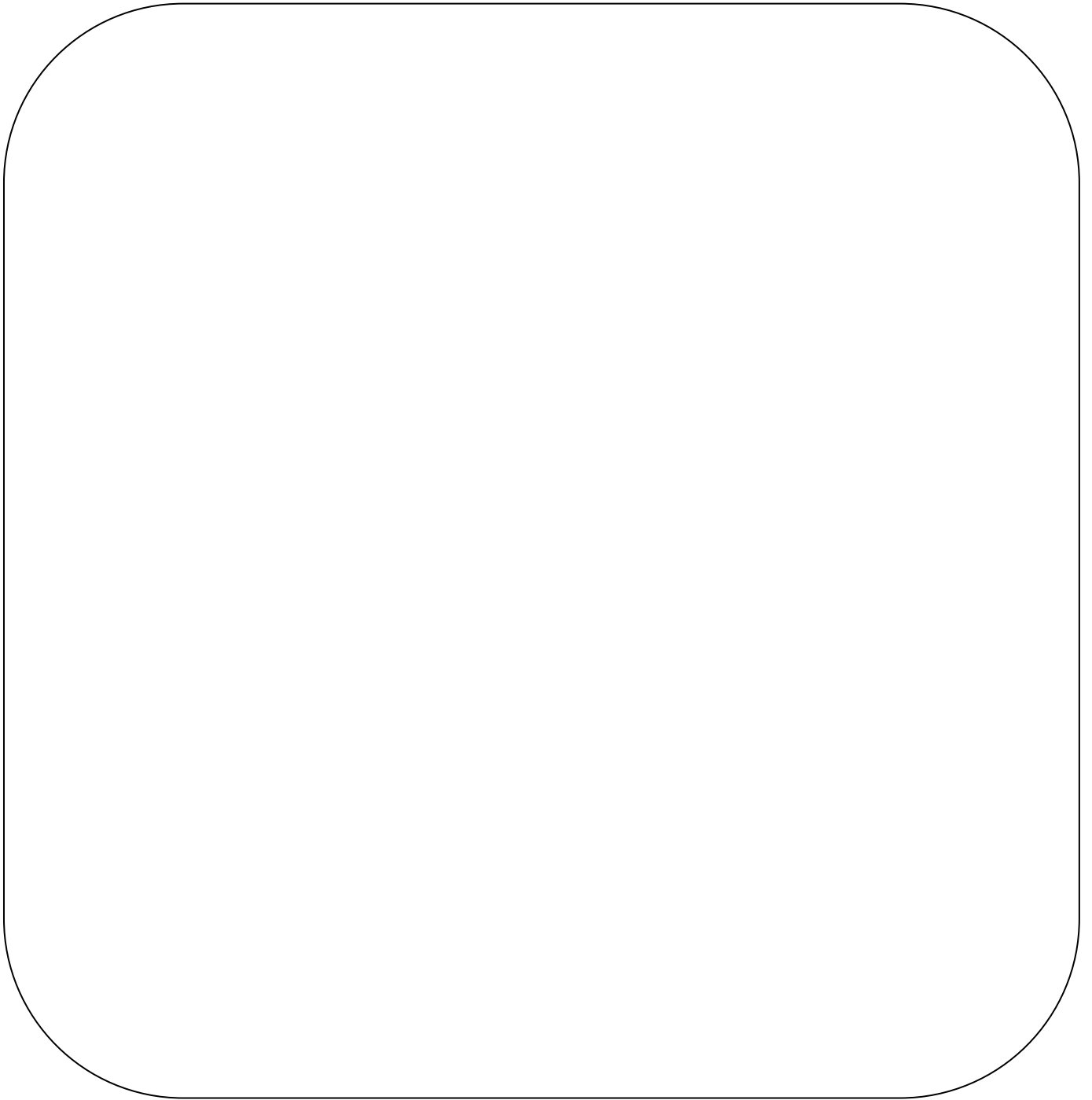


What do seeds need to sprout?

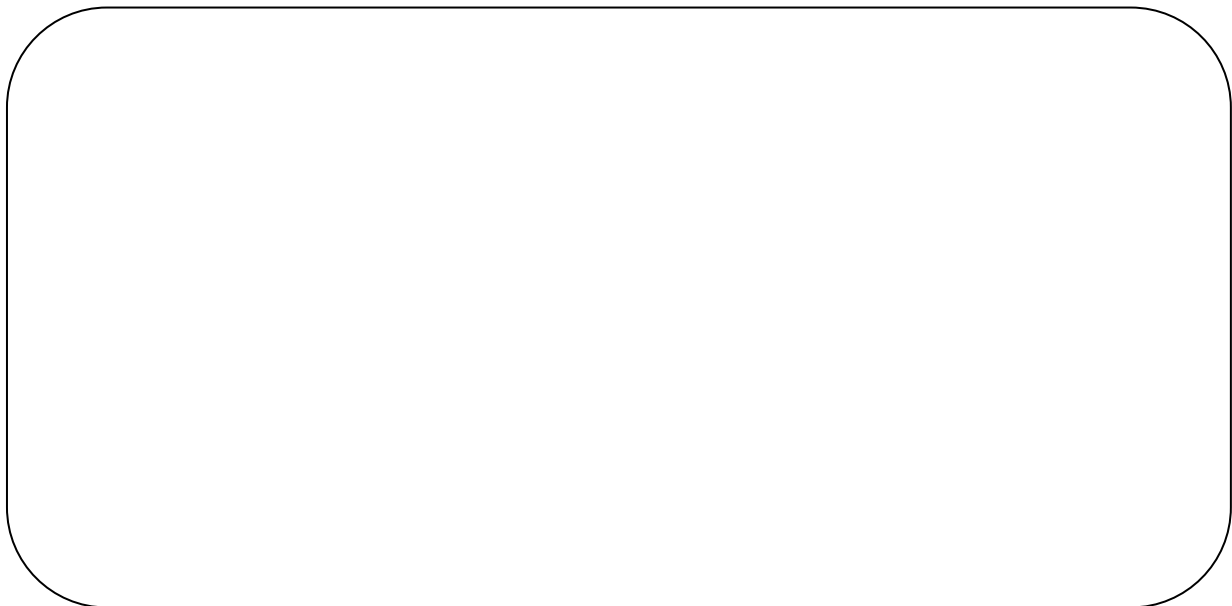


An investigation by: _____

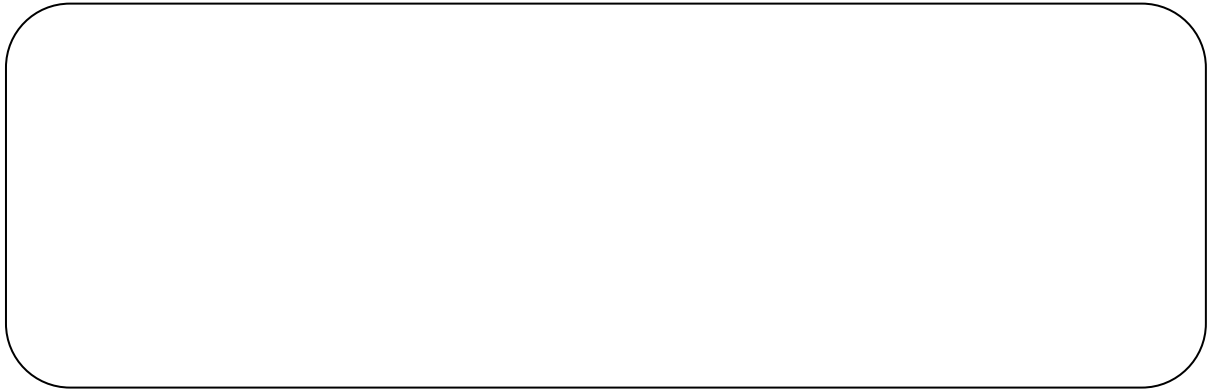
Seeds store energy and help plants reproduce. There are many different types of seeds. Here are some seeds that I have found in my food!



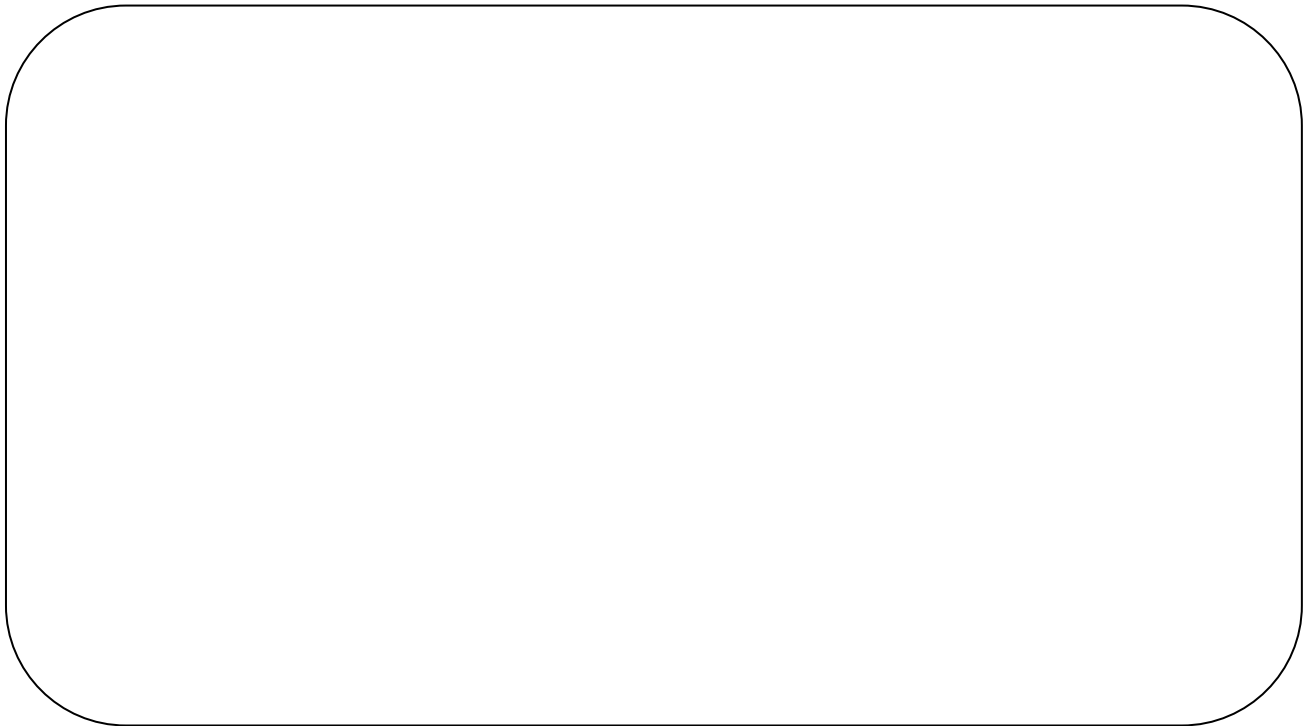
There are multiple things that are needed for a seed to sprout. Sprouting is when a seed begins to grow. Here are some of the things that I think seeds need in order to sprout.



Scientists say that a seed is germinating when the seed coat comes off of the seed and the radicle emerges.



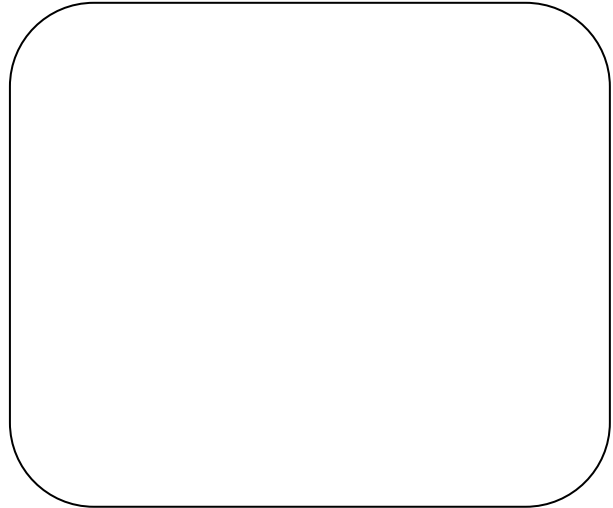
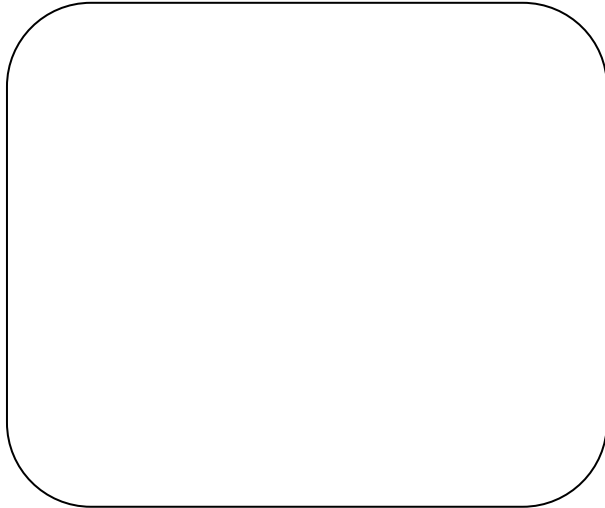
After just one day, we saw that when _____ was added to a _____ seed, the seed started to germinate. This means that _____ is one thing that seeds need to germinate.



We know that _____ is needed for germination because we conducted a controlled experiment. Some of the seeds were soaked in _____ for a day. Some of the seeds were left dry.

The test group: seeds in water

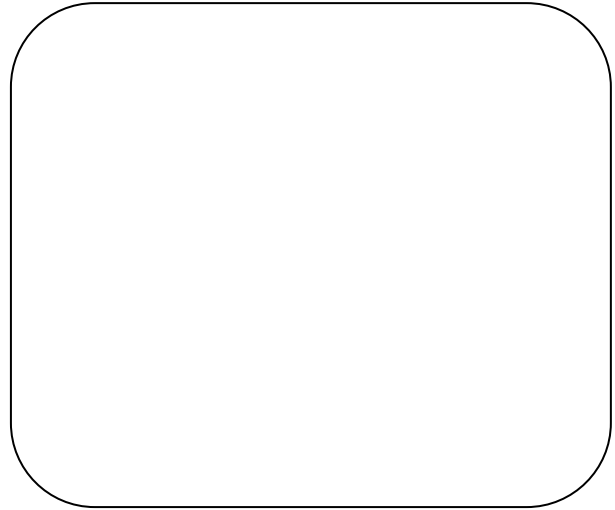
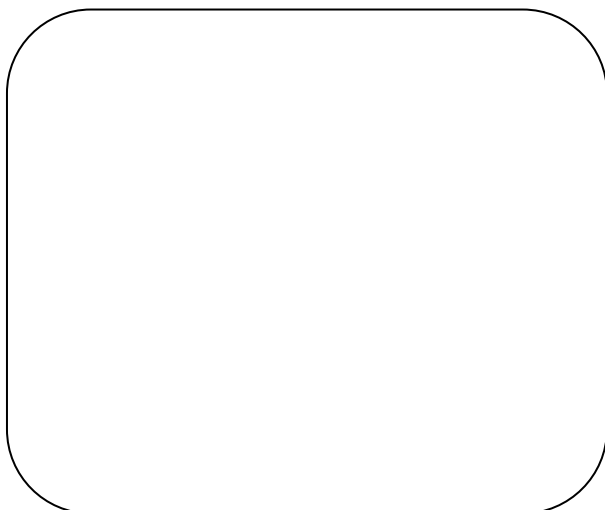
The control group: seeds without water



After just one day the seeds looked different. After two days, there was an even bigger difference.

The test group after two days

The control group after two days



We now have evidence that _____ is needed for seeds to _____.


With a team of scientists, I conducted another investigation to find out what else seeds need to germinate.

My team chose the variable _____
We also decided to use _____ seeds.

The question we investigated was...

My prediction is that...

This is a drawing of my experimental set-up here:



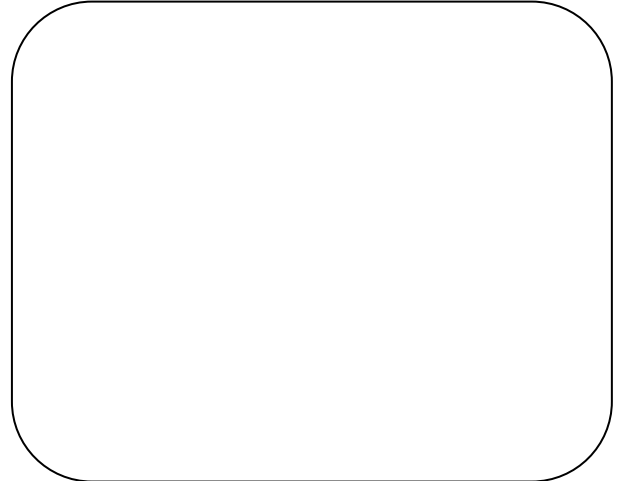
Seeds in my control group were rinsed in a jar with screen on it everyday and placed _____

Seeds in my test group were rinsed with water in a jar with screen on it everyday and placed _____.

Test



Control



Here are my observations for several days. I drew a picture of a seed from my control group and a picture of a seed from my test group.

Day 1: Test



Day 1: Control



Day 2: Test

Day 2: Control

Day 3: Test

Day 3: Control

I observed that after three days....

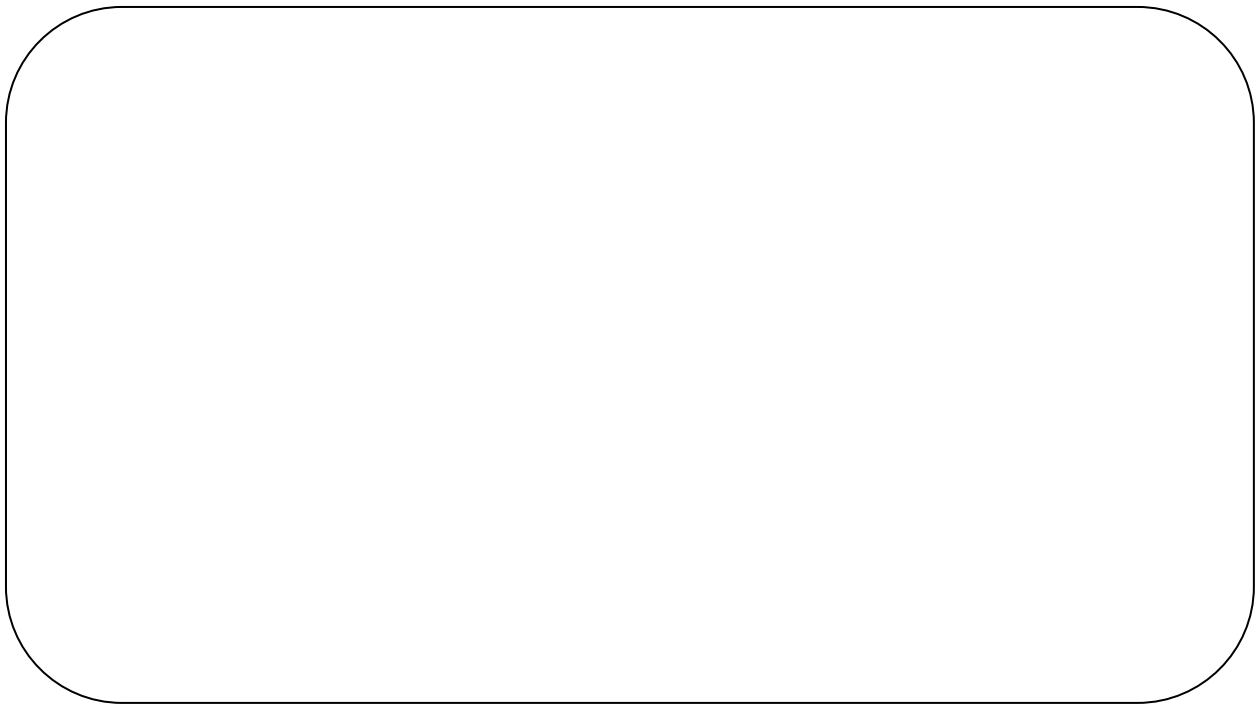
This is evidence that....

My classmates also conducted experiments on seeds.

One group investigated this question:

They found that...

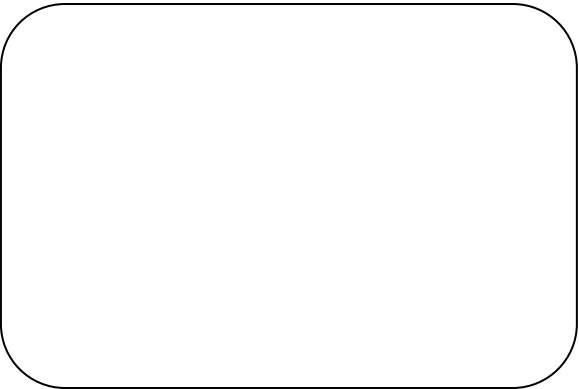
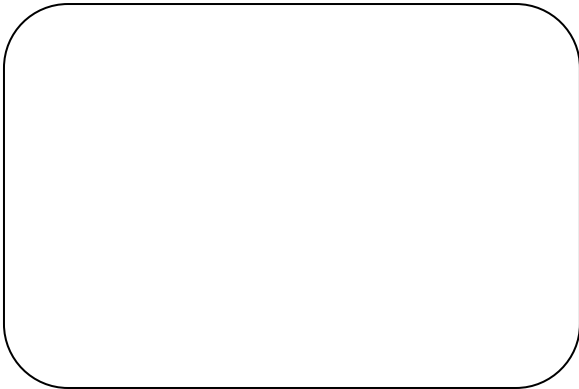
Here is a drawing of their experiment:



Here is a drawing of their seeds after three days

Test group

Control group



My other classmates found that...

Horizontal lines for writing observations.

Overall, I learned that seeds need... _____
because I observed that...

There are many different types of seeds and they all have different needs to germinate.

At home, I am going to do some more experiments to learn more about seed germination.

The question I will investigate at home is...

I predict that _____

This week, I learned how to conduct a controlled experiment that helped me answer scientific questions. A controlled experiment is _____

In order to be sure about my class's findings we should try our experiments again, or _____ them. Science experiments must be _____.

The most interesting thing I learned about seeds this week is _____

Glossary:

Image:	New word: Definition:
Image:	New word: Definition:
Image:	New word: Definition:
Image:	New word: Definition:
Image:	New word: Definition:
Image:	New word: Definition: