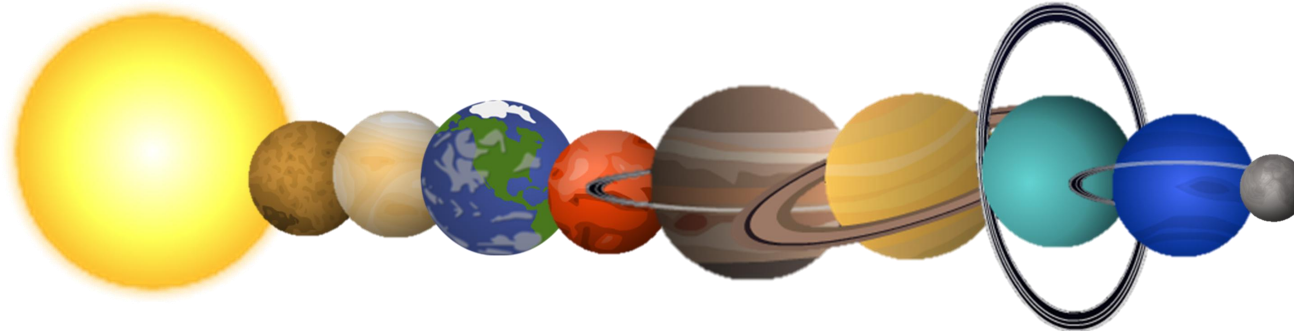




# Grade 4 Science



# Welcome to Grade 4 Science!



# What will we learn today?



The parts of a plant and their functions.



What plants need to grow.

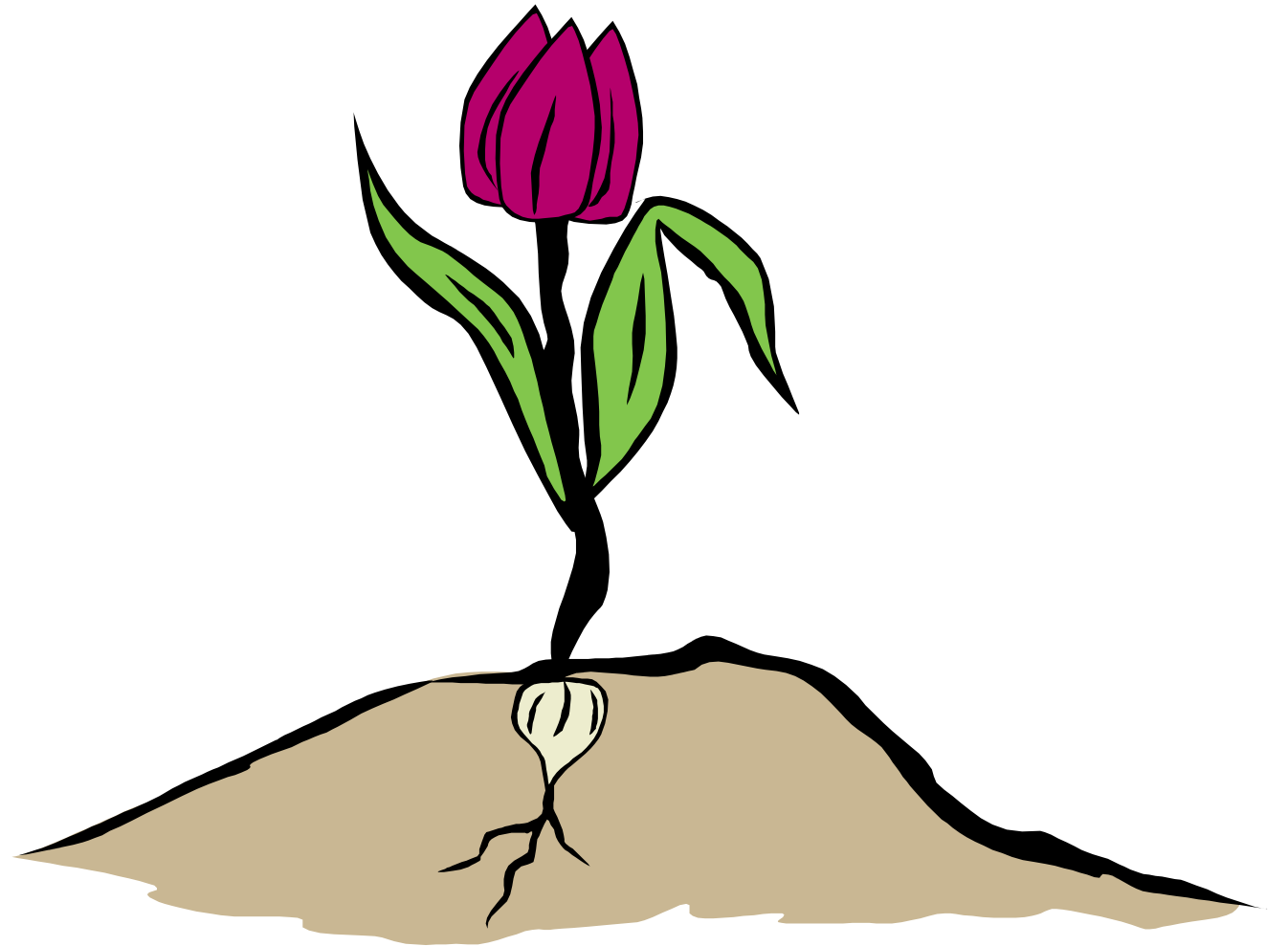


How to do a seed growth investigation.



The parts of a plant

There are four main parts of a plant.



**There are four main parts of a plant.**

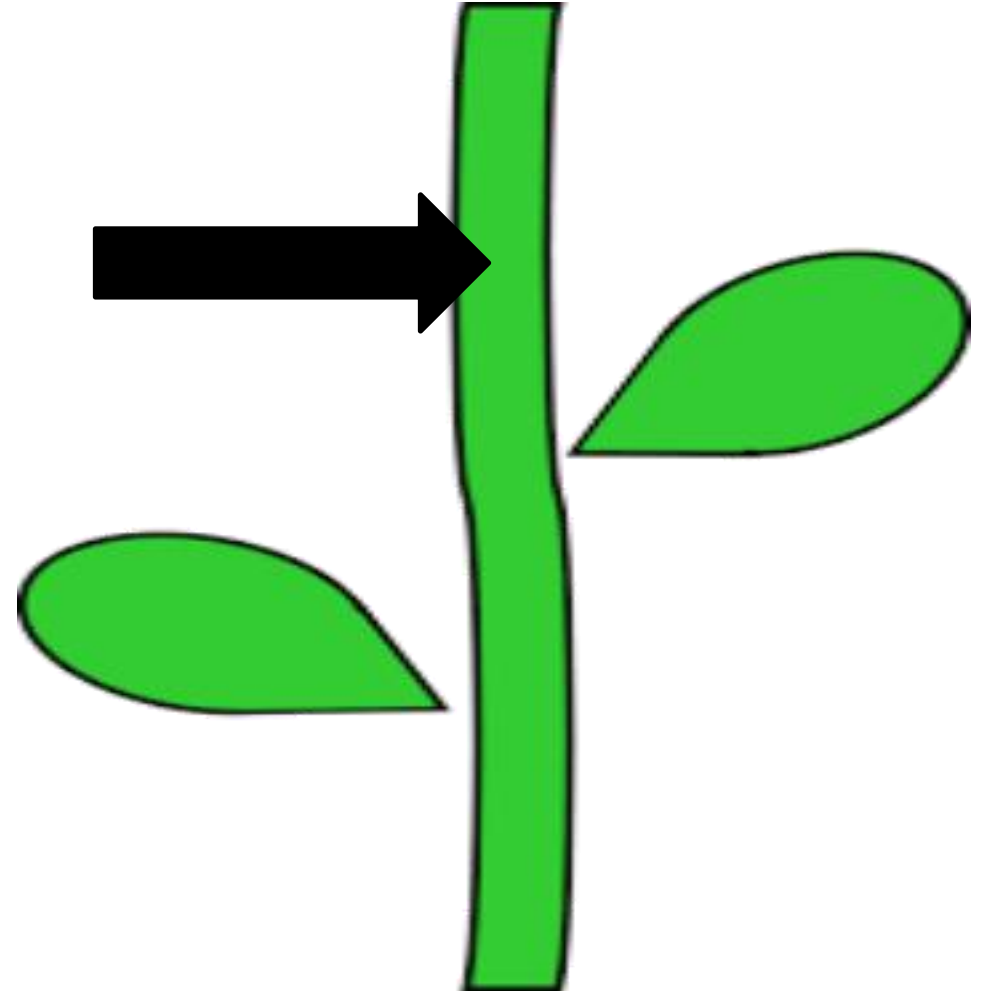
## **1. Root**



There are four main parts of a plant.

1. Root

2. Stem



There are four main parts of a plant.

1. Root
2. Stem
3. Leaves\*

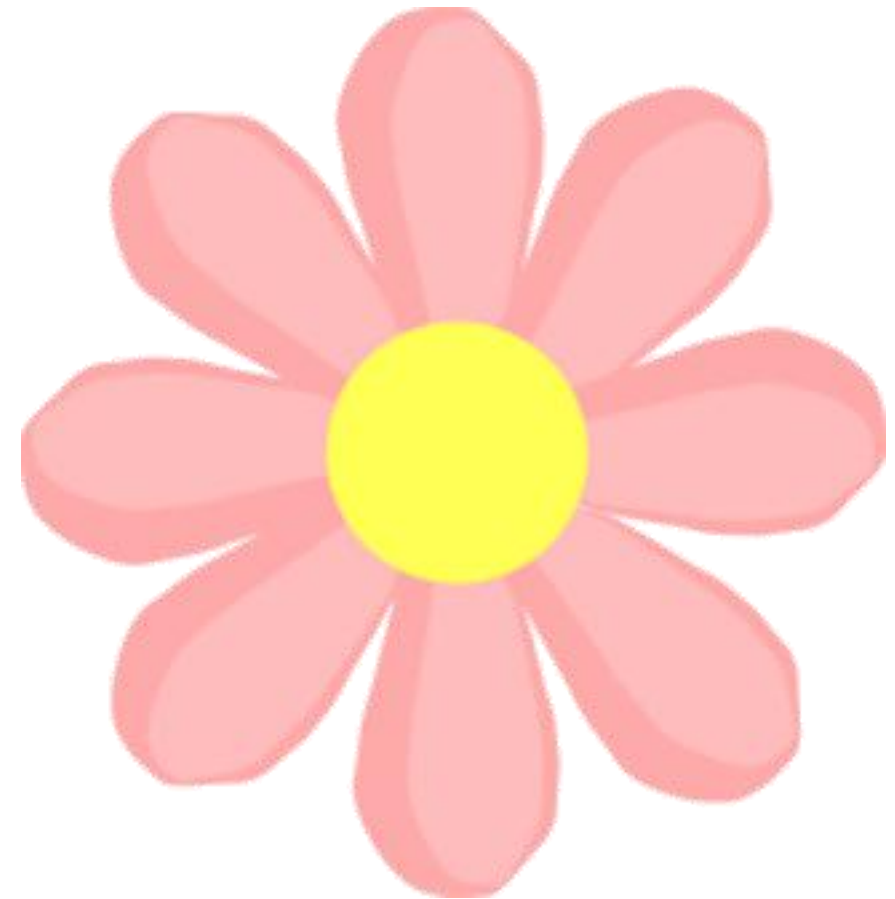
\*1 leaf / 2+ leaves





There are four main parts of a plant.

1. Root
2. Stem
3. Leaves
4. Flower

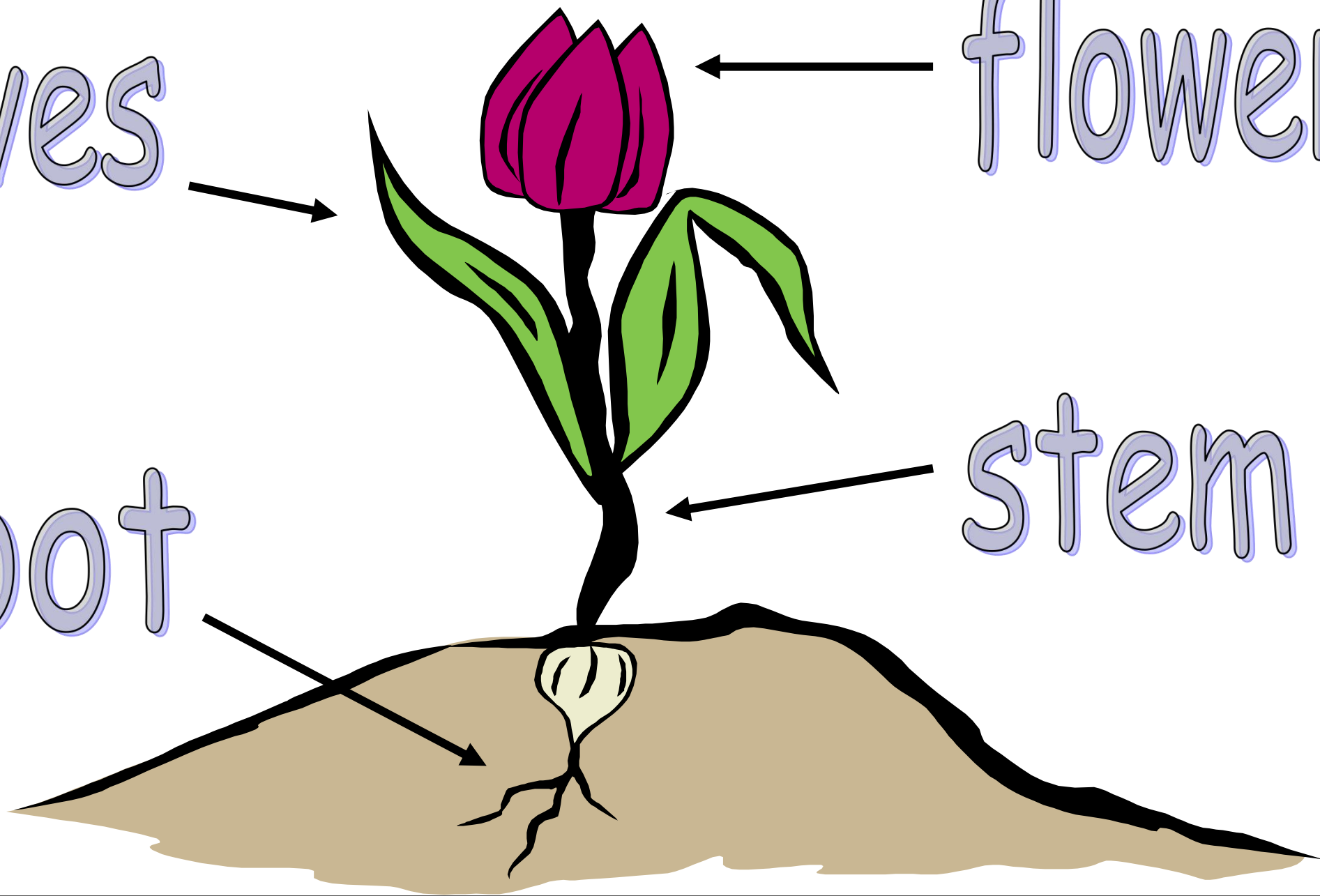


leaves

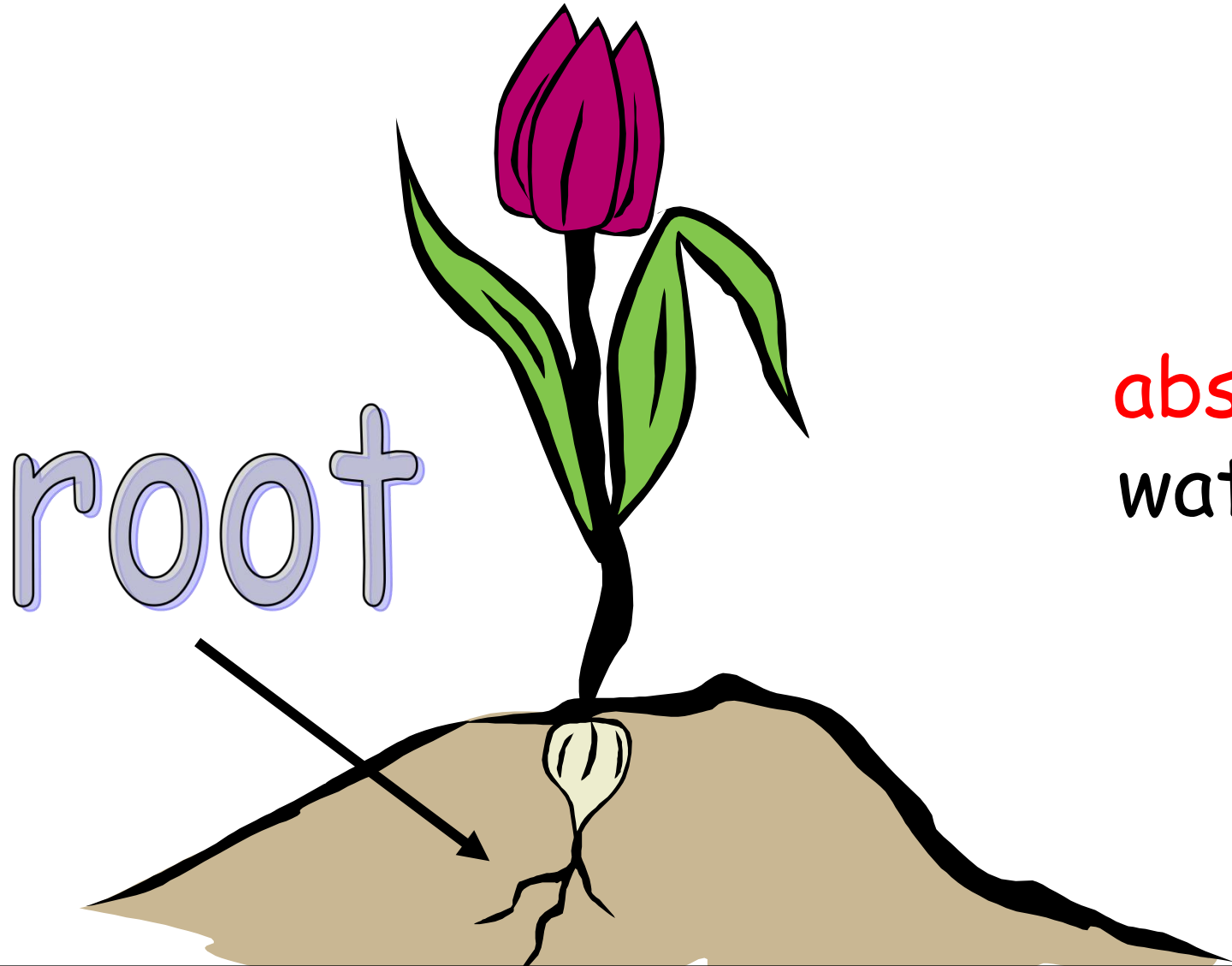
flower

root

stem

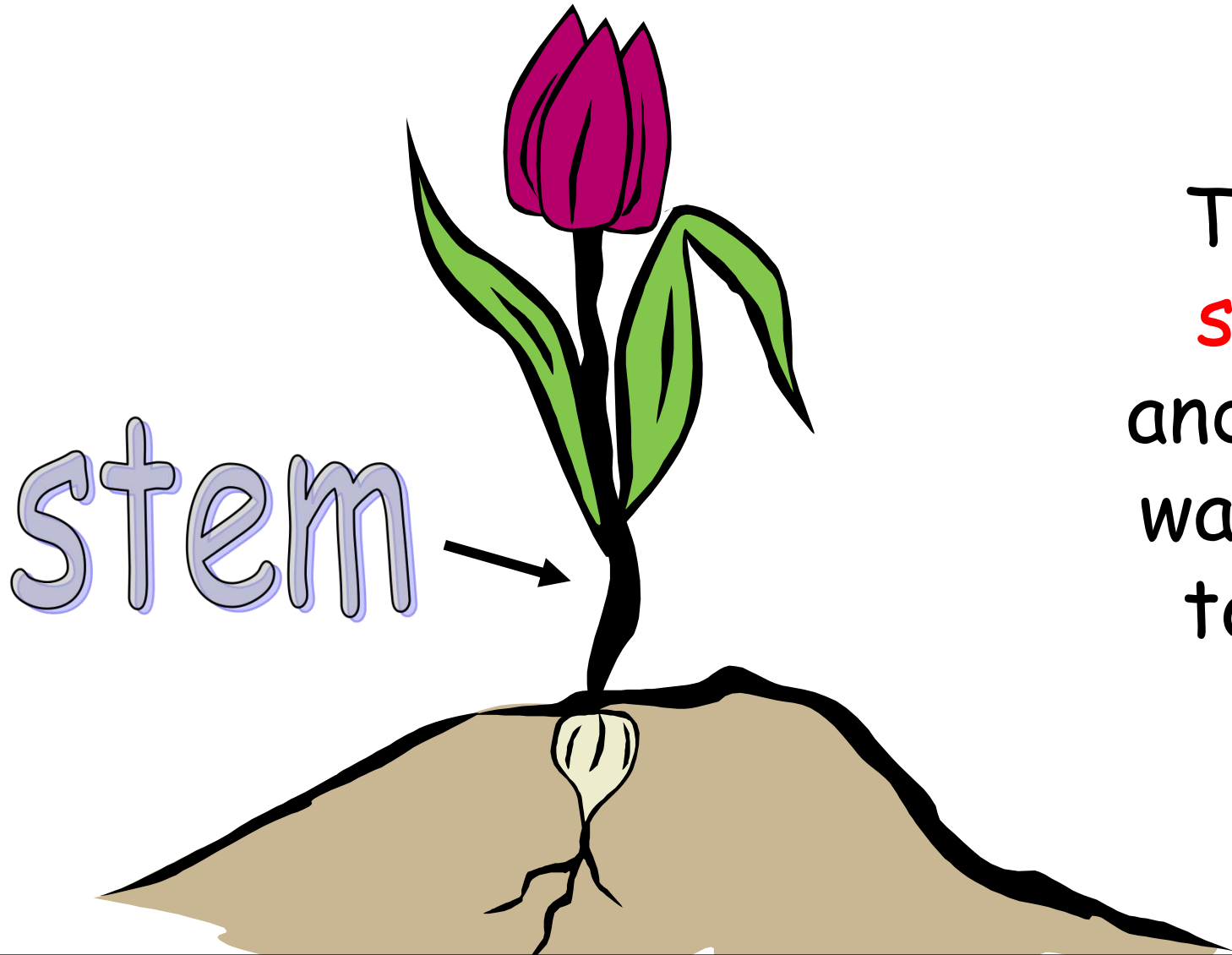


What is the function of the root?



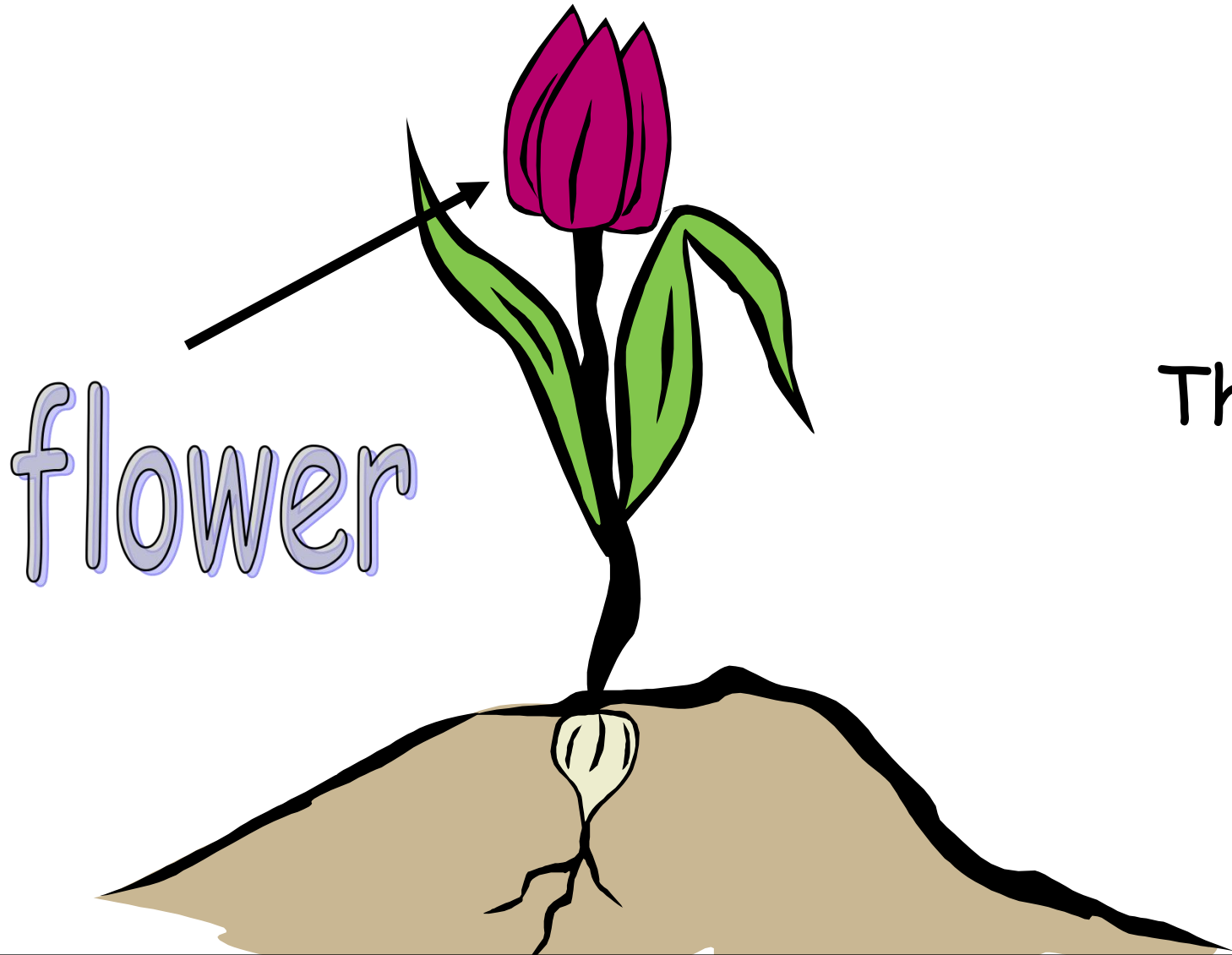
The root  
**absorbs** (takes)  
water from the  
soil.

What is the function of the stem?



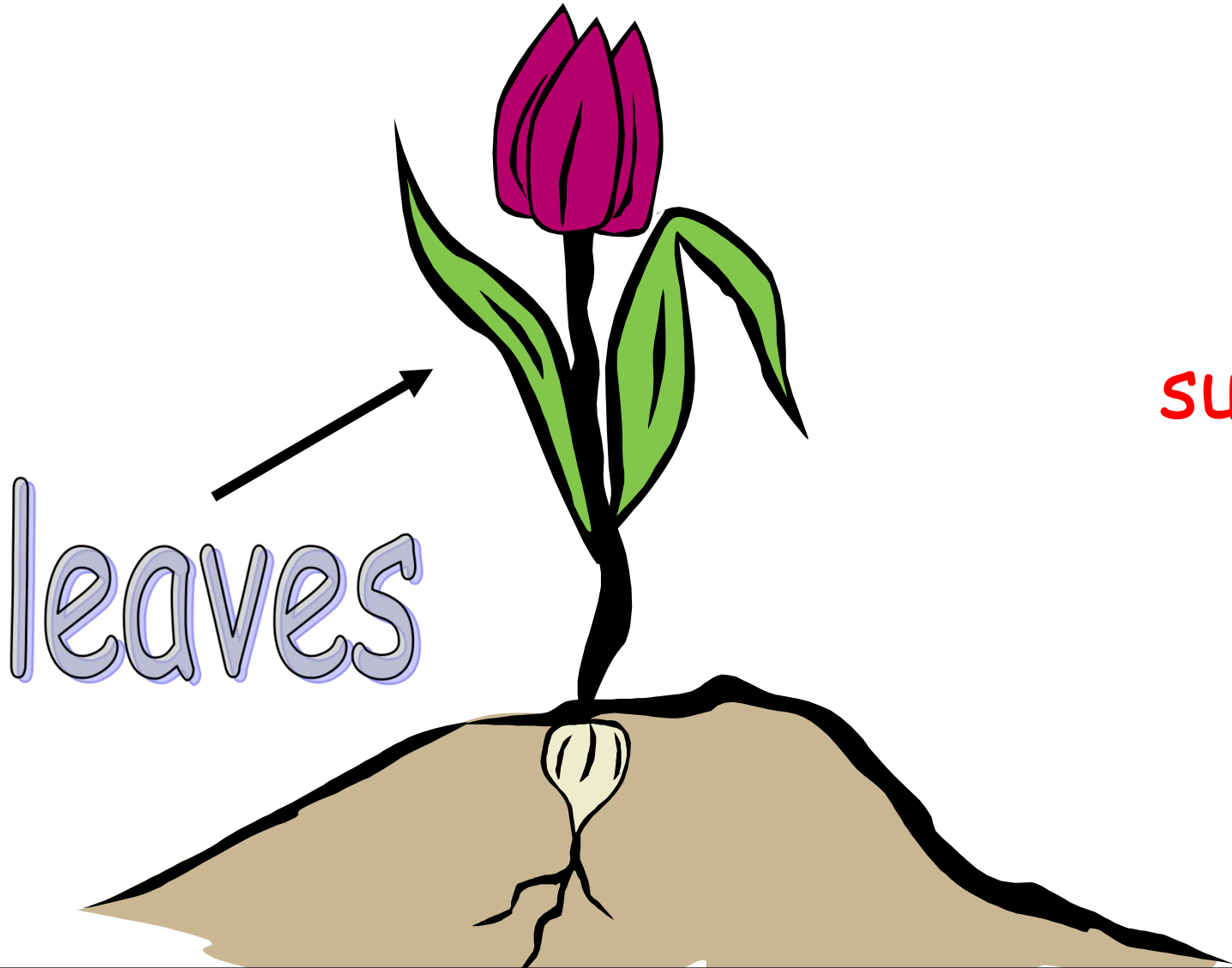
The stem helps to  
**support** the plant  
and **transport** (move)  
water from the root  
to the rest of the  
plant.

What is the function of the flower?



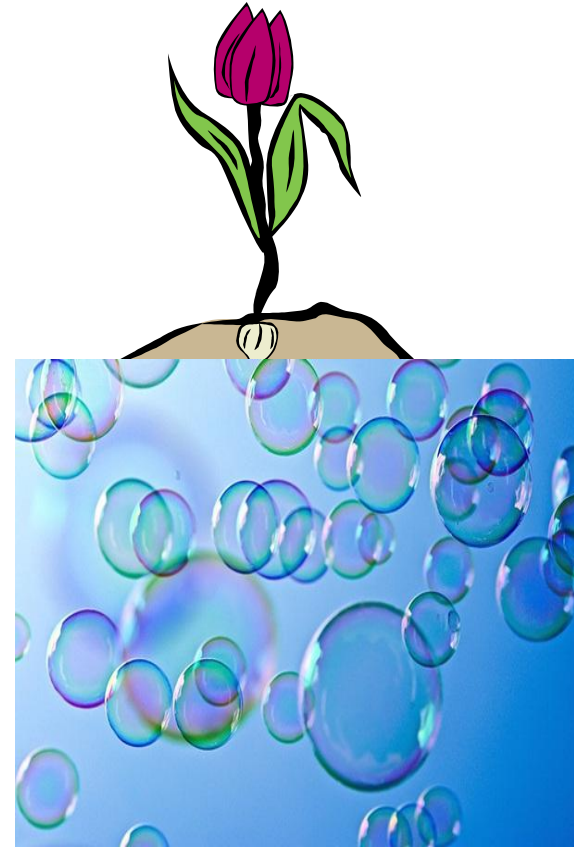
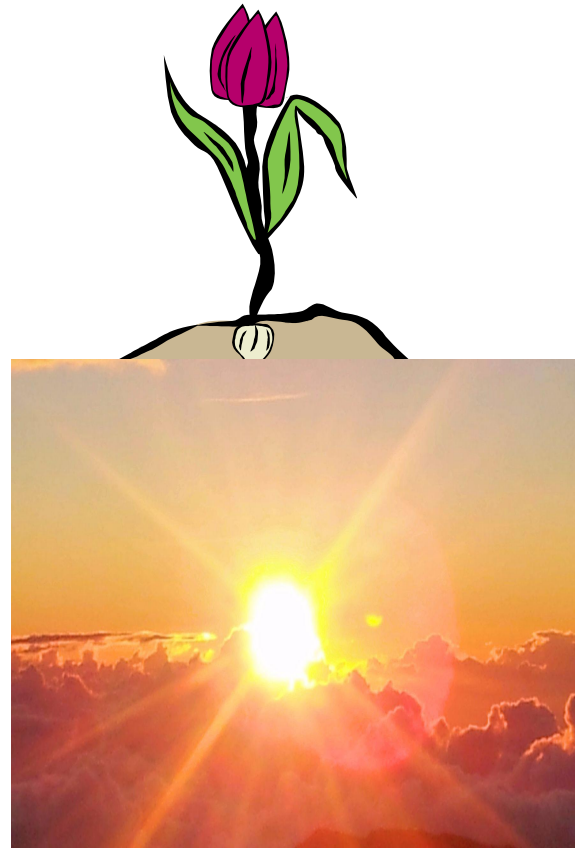
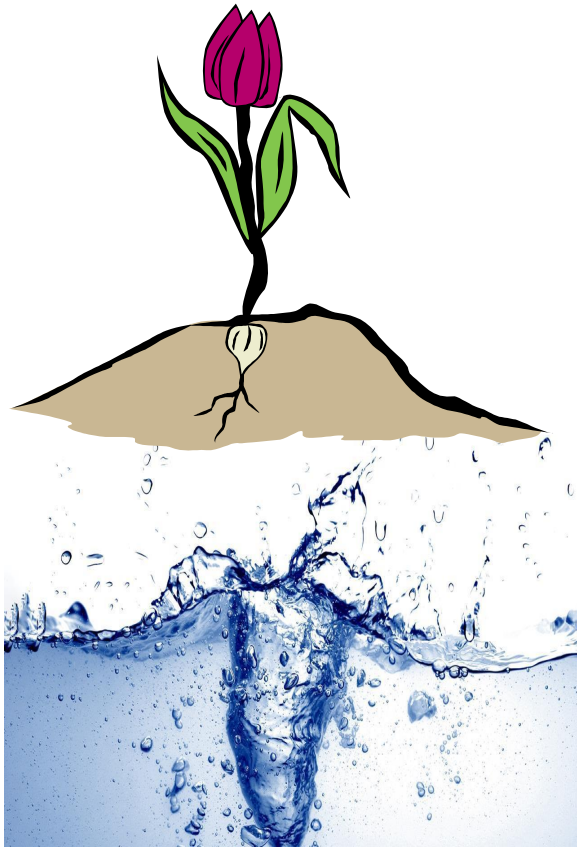
The flower **creates**  
(makes) seeds.

# What is the function of the leaves?



The leaves use  
**sunlight** to provide  
the plant with  
**energy**.

# What do plants need to grow?





Plants need many things to grow.

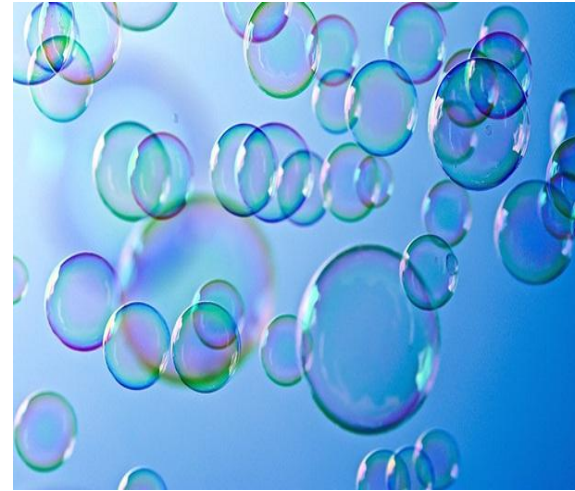
Can you name them?



water



sunlight



air



soil



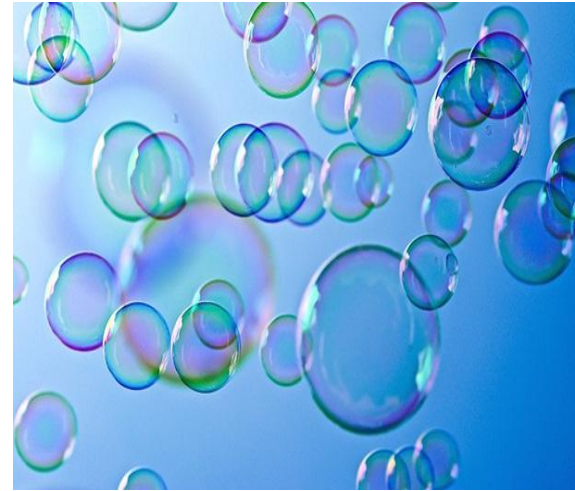
These are the four most important things  
that a plant needs to grow.



water



sunlight



air



soil

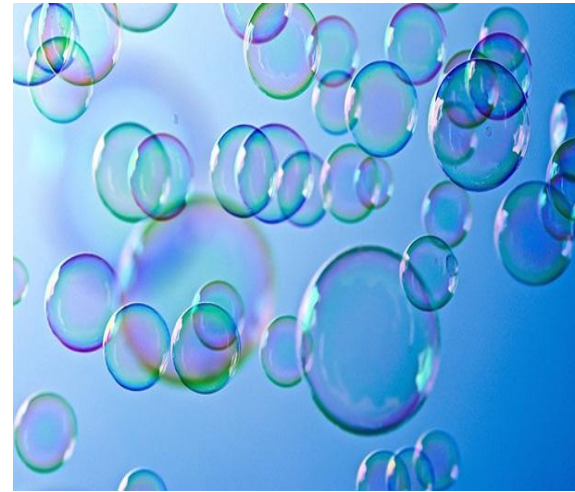
We can also add **space**.



water



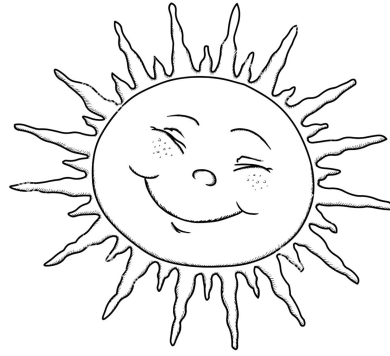
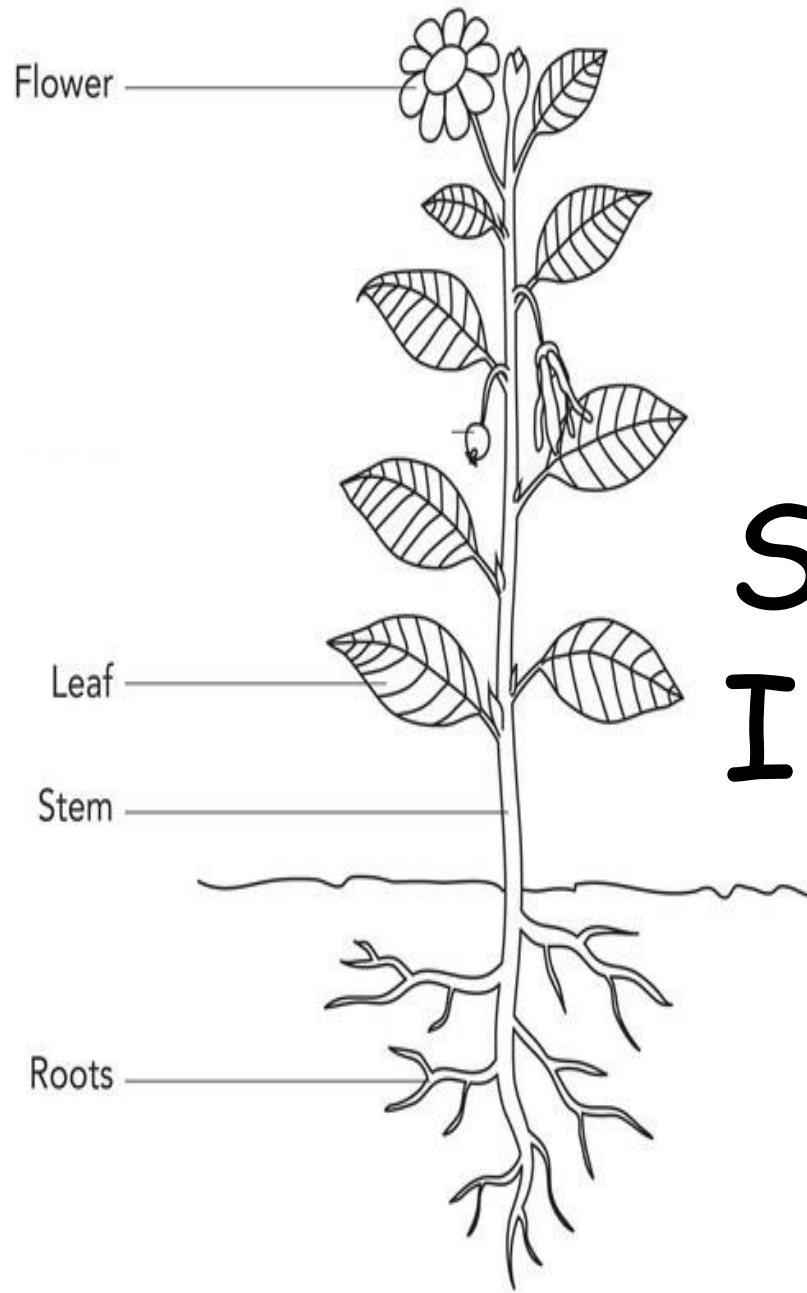
sunlight



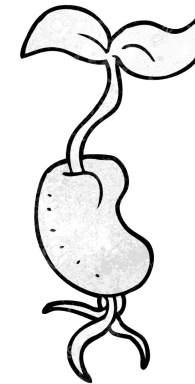
air



soil



# Seed Growth Investigation





Some students want to do an investigation.





# Seed Growth Investigation

Looking at the effects of water





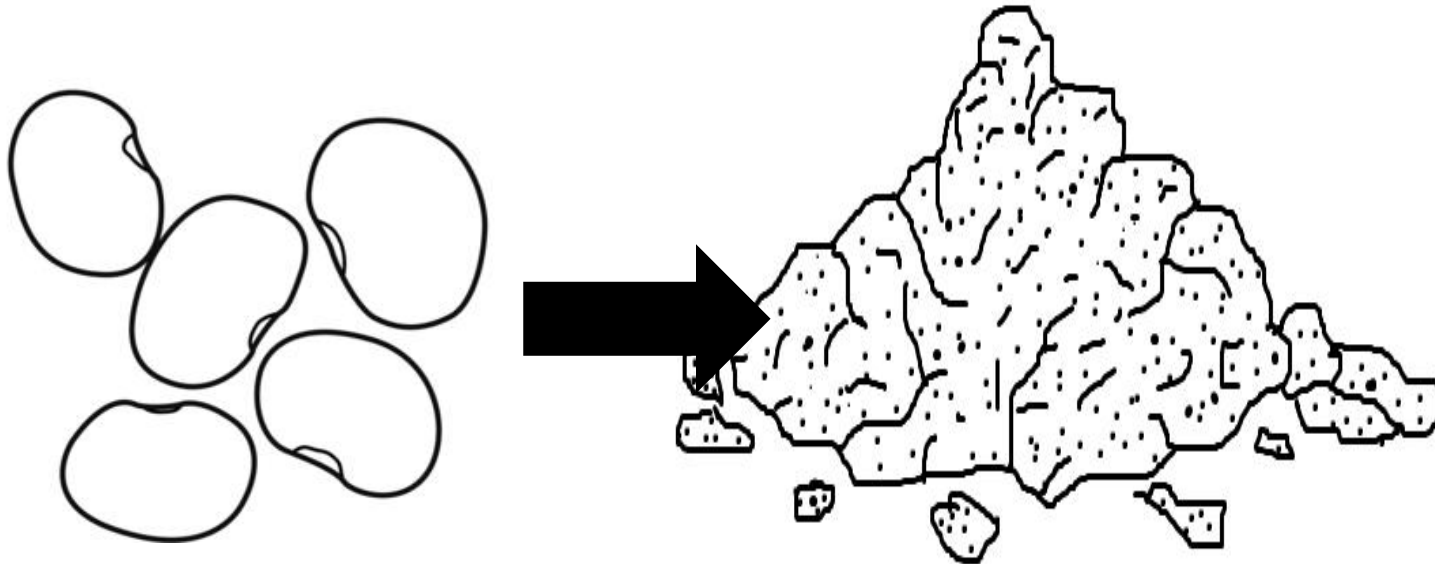


# Seed Growth Investigation

Looking at the effects of water



They are going to  
put some **seeds** in soil.



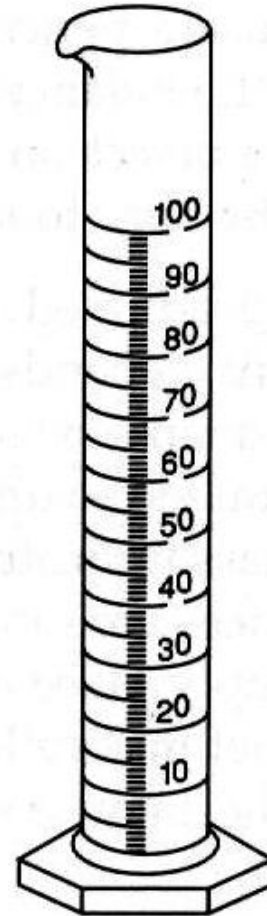


# Seed Growth Investigation

Looking at the effects of water



Then they  
will give  
them  
**different  
amounts  
of water.**







# Seed Growth Investigation

Looking at the effects of water



What is the aim\* of the students?



*\*What do they want to find out?*







# Seed Growth Investigation

Looking at the effects of water



## Aim

To find out how the **amount of water** affects the growth of the seeds.





# Seed Growth Investigation

Looking at the effects of water



How can they do this?



# Seed Growth Investigation

Looking at the effects of water



They need a **method**\*.

*\*A step by step  
list of what to do  
in the investigation.*





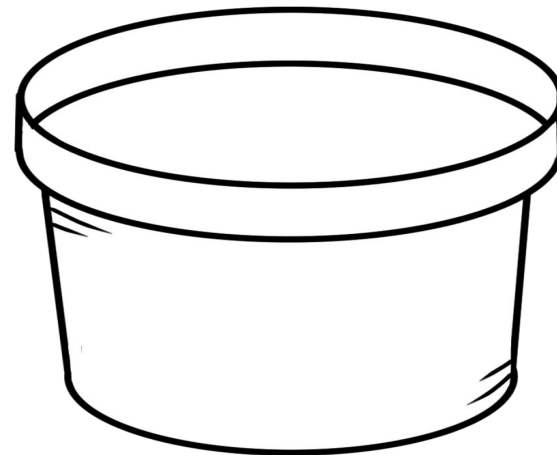
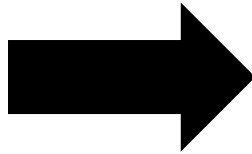
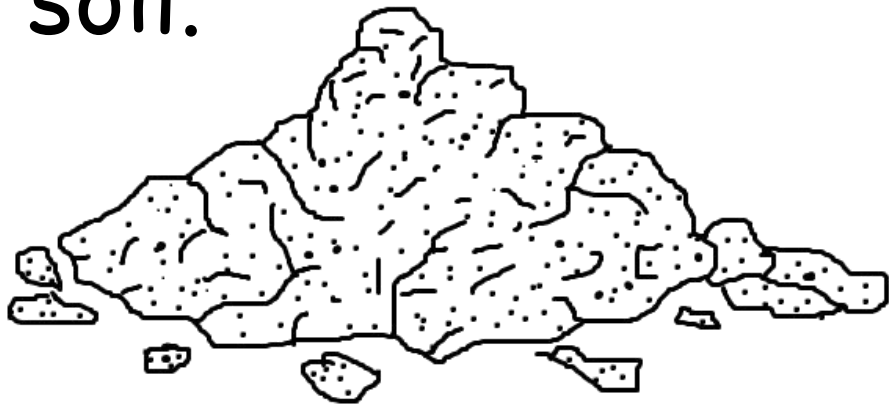
# Seed Growth Investigation

Looking at the effects of water



## Method

First, fill each container with the **same** amount of soil.





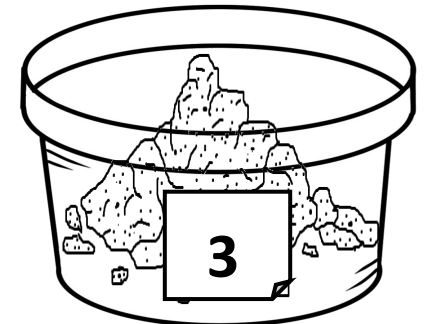
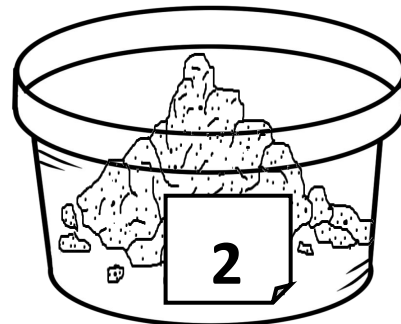
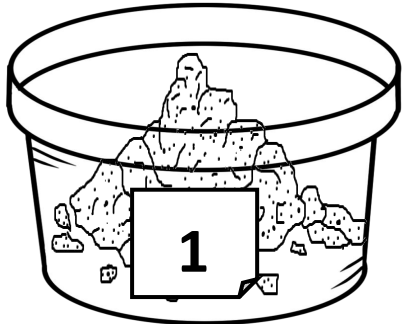


# Seed Growth Investigation

Looking at the effects of water



Next, label the  
containers:  
1, 2 and 3.



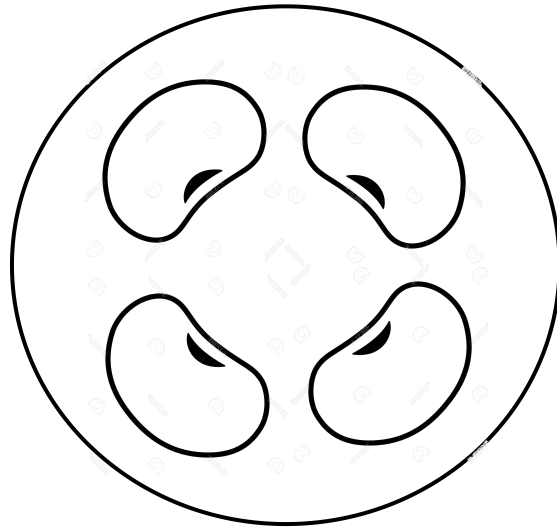


# Seed Growth Investigation

Looking at the effects of water



After that, put four seeds in each container, equally spaced.



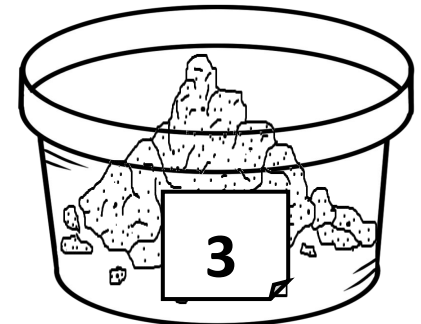
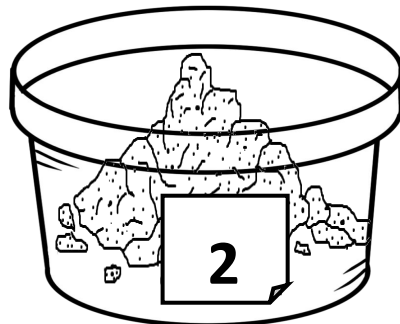
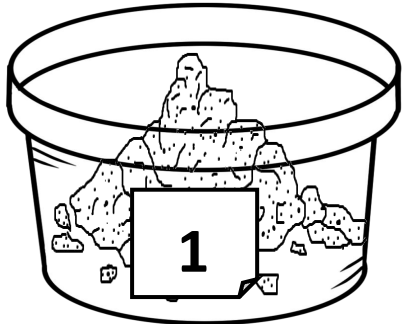


# Seed Growth Investigation

Looking at the effects of water



Finally, the students will leave the seeds in a safe place for three weeks.



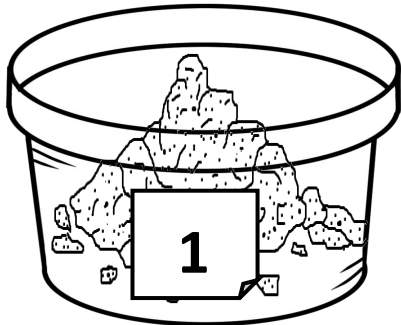


# Seed Growth Investigation

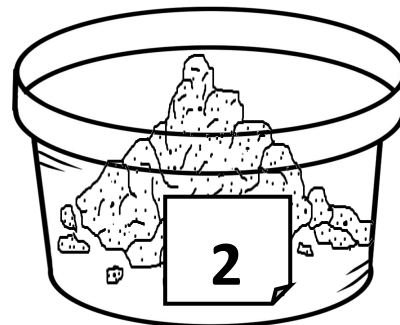
Looking at the effects of water



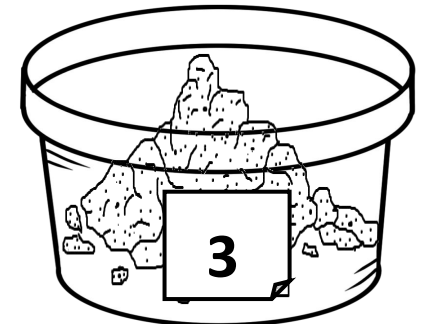
Plant 1  
will **not** be  
watered.



Plant 2  
will be given  
100ml of water  
only **once**.



Plant 3  
will be given  
100ml of water  
**once every week**.







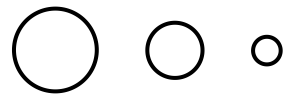
# Seed Growth Investigation

Looking at the effects of water



When we do an investigation, we must always think about a

**fair test**





# Seed Growth Investigation

Looking at the effects of water



But what is a  
fair test?





# Seed Growth Investigation

Looking at the effects of water



How many  
things do we  
change?





# Seed Growth Investigation

Looking at the effects of water



To get results we can trust, we should only

change one variable (= factor = thing)

In contrast, we must try to keep all other variables  
the same.



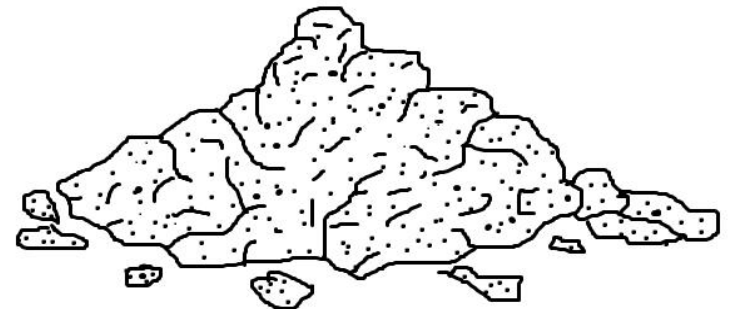
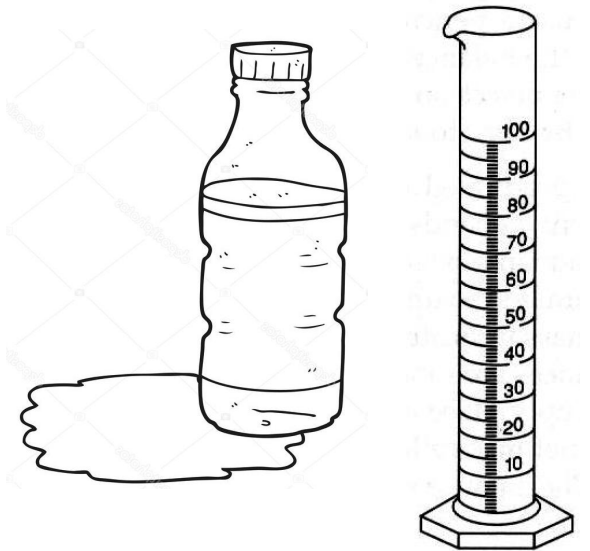
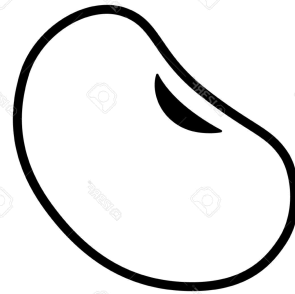
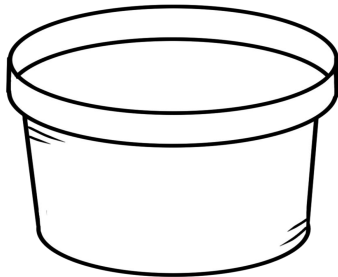
# Seed Growth Investigation

Looking at the effects of water



Think about this investigation.

What did we **change**?







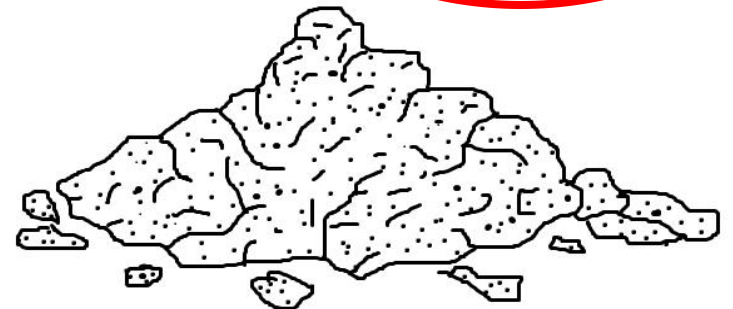
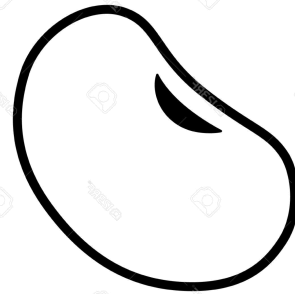
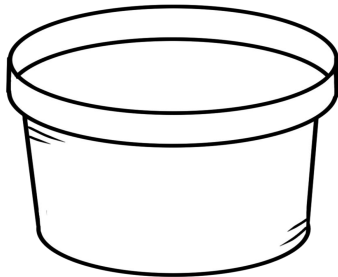
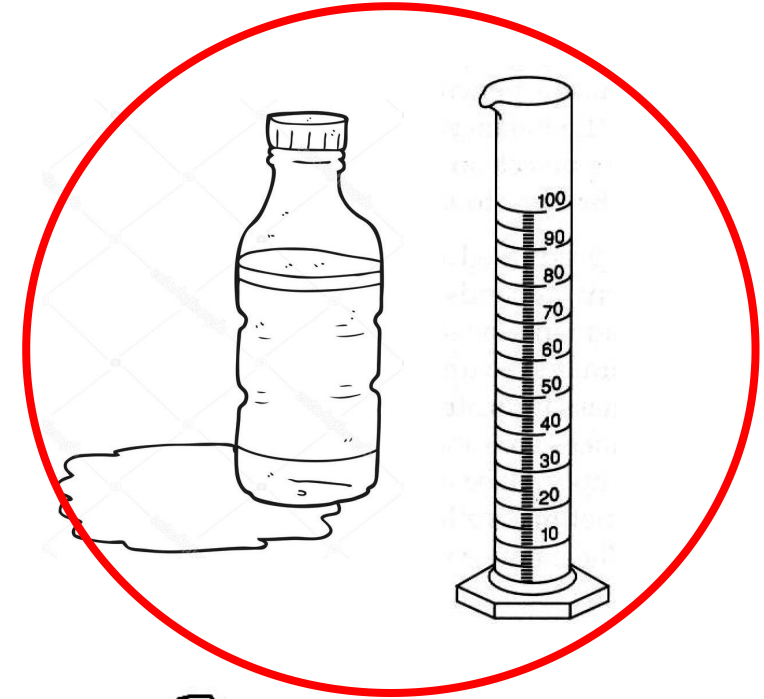
# Seed Growth Investigation

Looking at the effects of water



Think about this investigation.

What did we **change**?





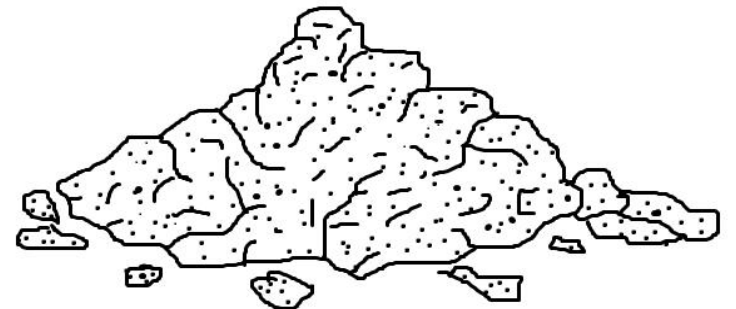
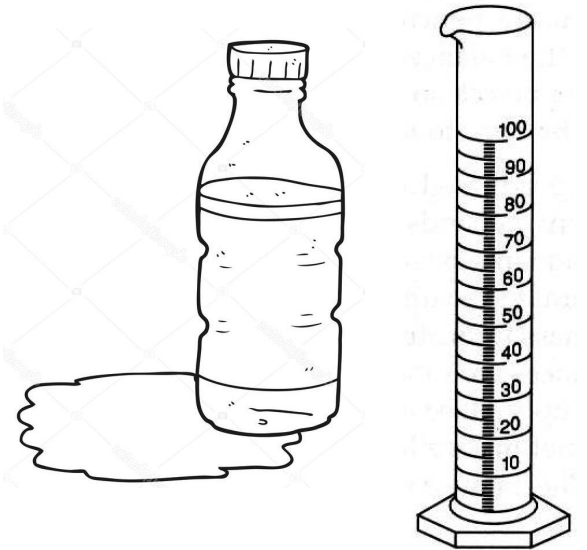
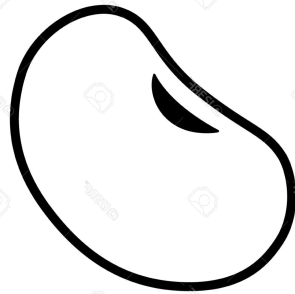
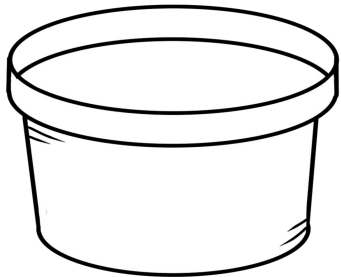
# Seed Growth Investigation

Looking at the effects of water



Think about this investigation.

What did we keep the **same**?





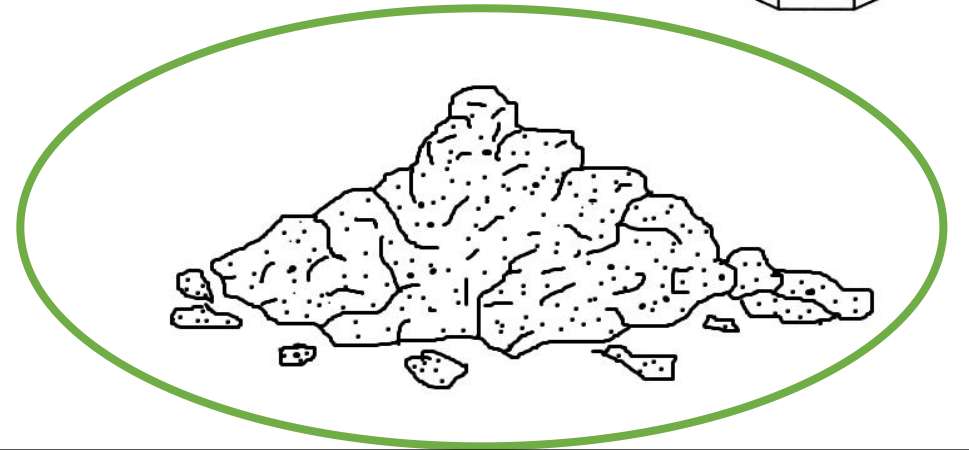
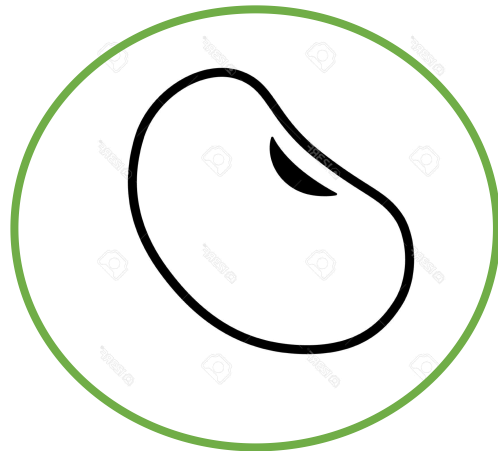
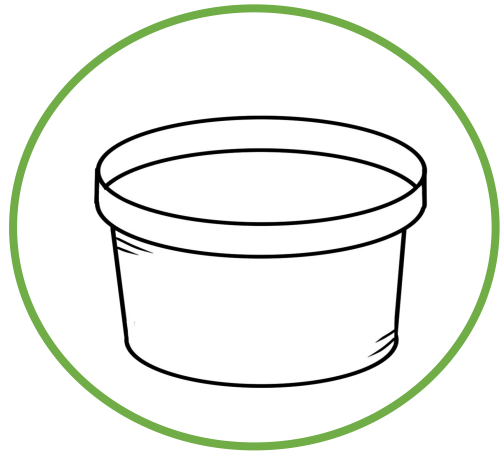
# Seed Growth Investigation

Looking at the effects of water



Think about this investigation.

What did we keep the **same**?

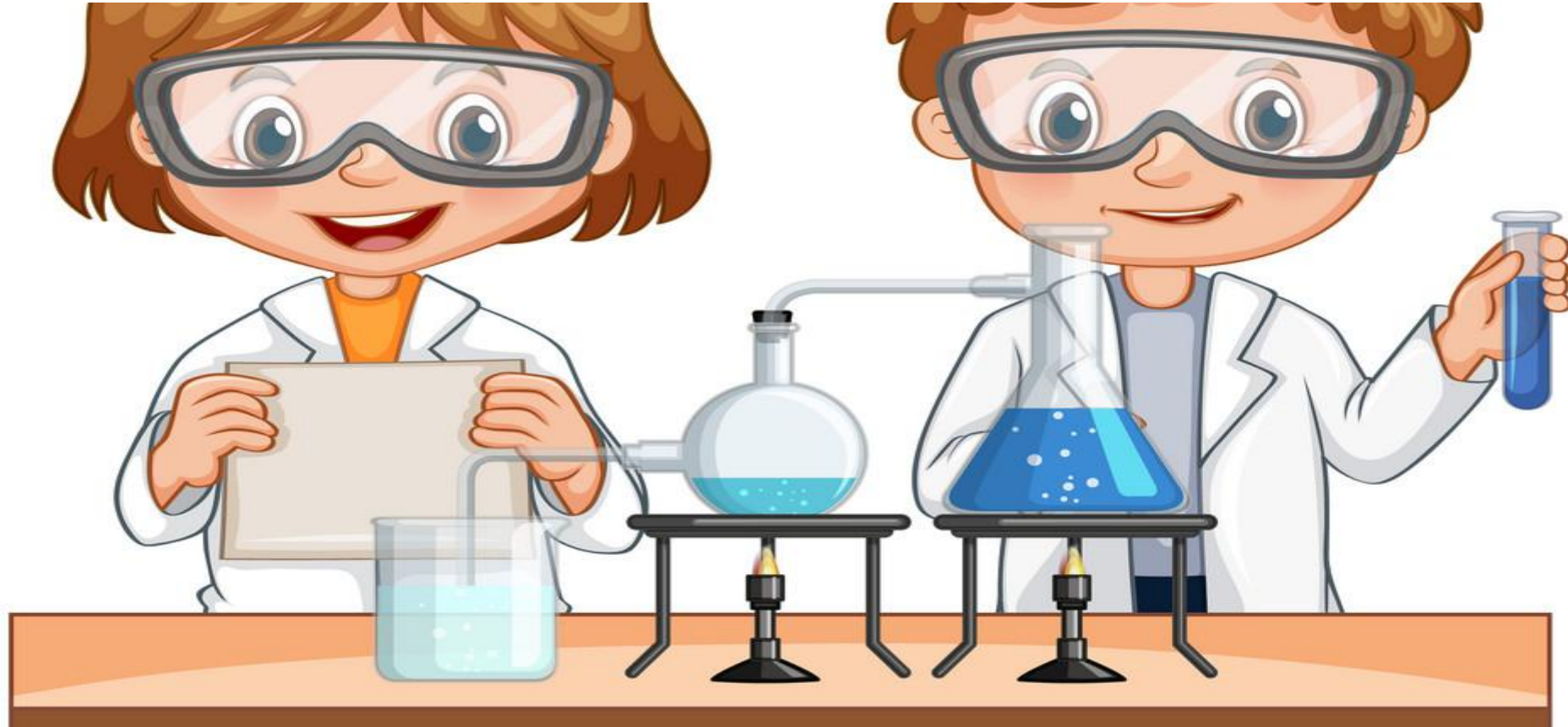






# Seed Growth Investigation

Looking at the effects of water



Now the students are ready to do the investigation.

Well done, everybody! Goodbye!

