

Plants and Animals  
3rd Edition  
Grade 1  
Sample Notebook

## Active 1.

- \* Teacher demonstrates planting procedure  
Page 58-59 of manual

Then students plant own lawn.

What do you notice about seeds? senses

plant alfalfa and ryegrass grass

Properties /  
Observation

Seed	Observation
alfalfa	round, brown, small
ryegrass	pointed, gray, oval, bigger long and thin

↑  
Students may only  
write 1 or 2 properties (differentiate naturally)

- kk  
\* Plant control  
lawn and  
label control)

Day 1

\* Teacher Tip: Plant extra  
in case somebody does  
not get a sprout.

# I.I write

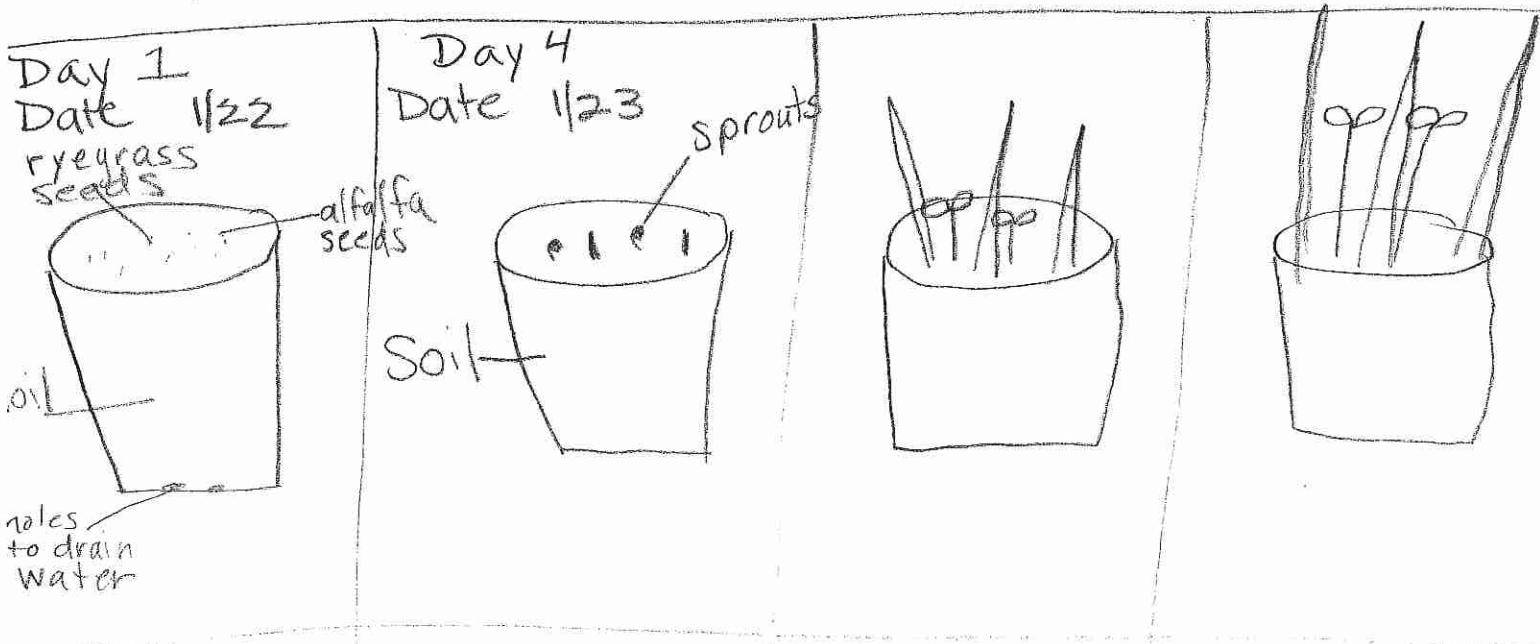
I noticed that the alfalfa seed is round whereas / but the ryegrass seed is oval and pointy. I wonder if they will look different when they grow. (for students who are ready - add "because..." to the I wonder statement.)

- During shared writing you may add an In addition statement.  
Such as: In addition, the alfalfa seed is brown but the ryegrass seed is gray.

# 1.1 Plant Overtime Chart

Active

changes glue in lawn  
What happens to ryegrass and alfalfa seeds  
in moist soil? dirt?



## Prediction

I think plants will grow because my lawn grows.

- Sprouts coming up
- White and small
- 4 sprouts
- need light
- nutrients added to water
- alfalfa has round leaves
- ryegrass has long, thin leaves
- getting taller
- taller
- alfalfa has a stem
- green leaves

fold out sheet

Teacher Tip: Make a class chart with all observations. Student notebooks may not have all info. Then write on their own 1 or 2 then Share out as you add to class chart.

I wonder ...; I think ...

1.1  
Writing

1/23 I wonder what the plant will look like.

1/27 I wonder how tall it will get

or

I think the plants will keep getting taller. (because...)

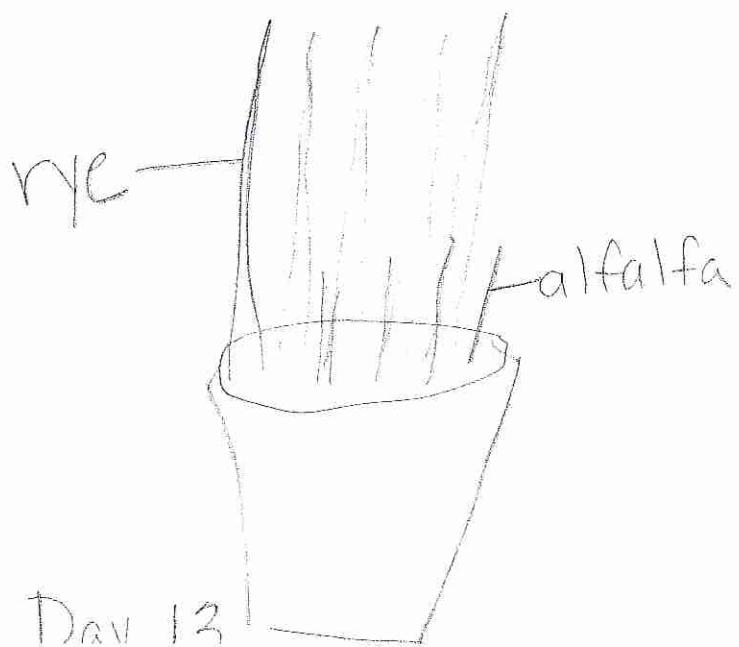
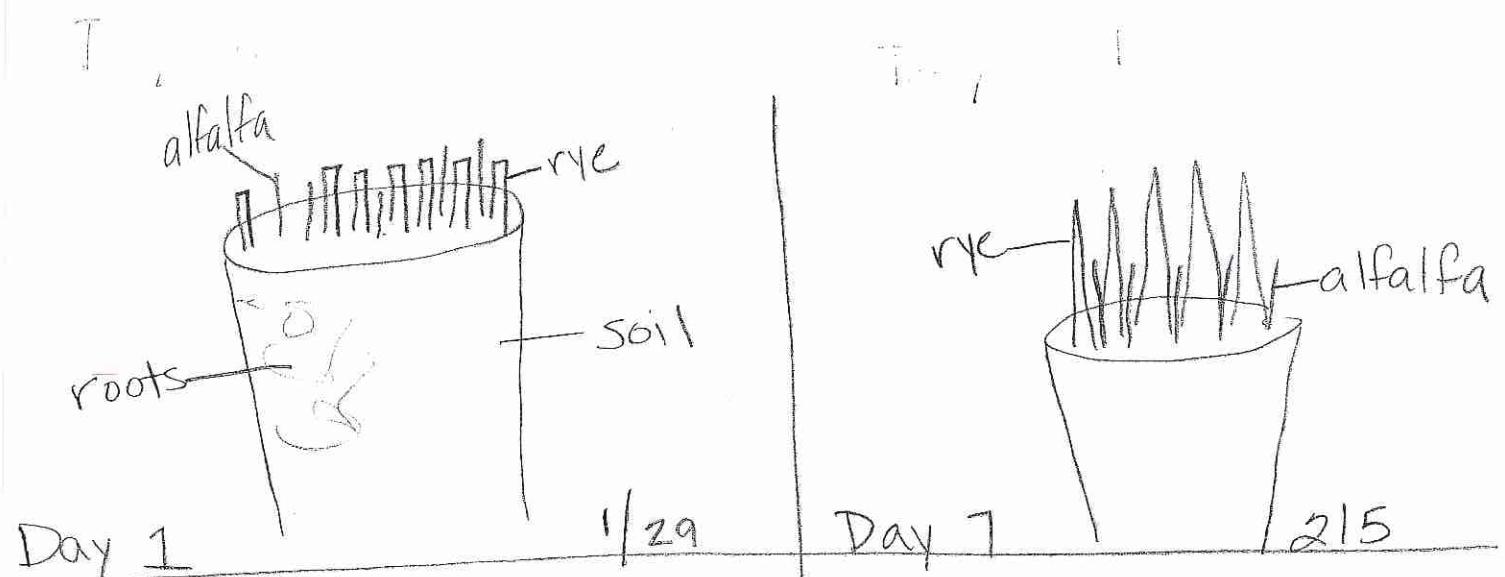
1/29 I wonder if the alfalfa can grow as tall as the ryegrass.

ASK - What do you think/predict will happen.

Share Notebook Entries

## 1.2 Active

What happens to the grass  
and alfalfa plants after we  
mow them?  
cut



Teacher Tip:  
Do not cut  
your control  
lawn... students  
need to  
compare.

## 1.2 Writing (3 sessions - see calendar)

Day 1: We mowed our lawns. We used scissors to cut our grass and alfalfa. I think it will grow back because my mom mows the lawn a lot.

Day 7: I notice the grass is growing taller but the alfalfa is not. I think the alfalfa may grow but it takes longer. [or I wonder if the alfalfa will grow.]

Last observation - Do a compare and contrast writing piece  
See next page.

1.2 Writing Day 13/14

How are ryegrass and alfalfa similar and different?

Do together as a class

Need water, light, nutrients,  
air to grow

Both are  
Plants

green leaves

Start as a  
seed

### ALFALFA

Small round seed

has stem

more than one  
leaf

dies if cut

### RYE GRASS

long thin seed

no stem

one leaf

will keep growing if cut

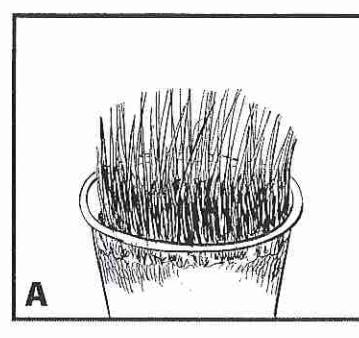
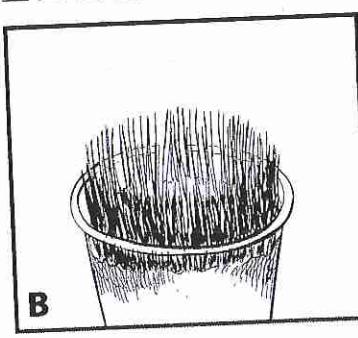
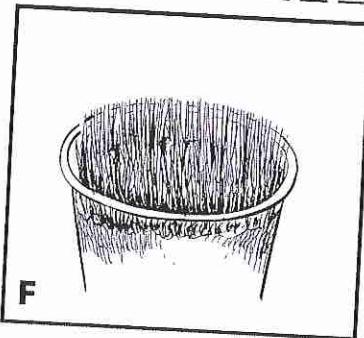
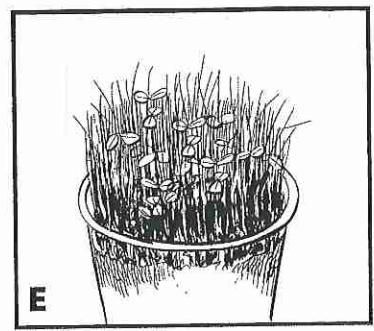
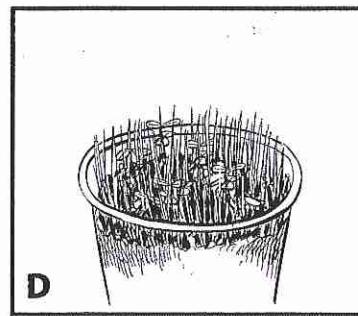
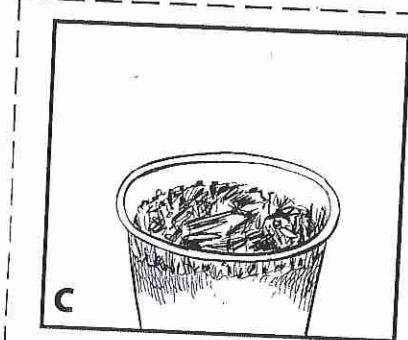
## 1.2 Writing (Last observation)

Alfalfa and rye grass are similar because they both start as a seed. In addition, they both need water to grow. They are different because rye grass will keep growing when it is cut whereas alfalfa dies. I think grass is better for lawns because it won't die when we mow it.

## Growing and Mowing a Lawn

Cut the six pictures apart.

Put the pictures in order to show what happens when a lawn is planted and grows, is mowed, and then grows again.



Use as assessment



# 1.3 Active

- \* Teacher models wheat straw process
- \* each student prepares 2 straws

Then, observe seeds & discuss how to position in straw

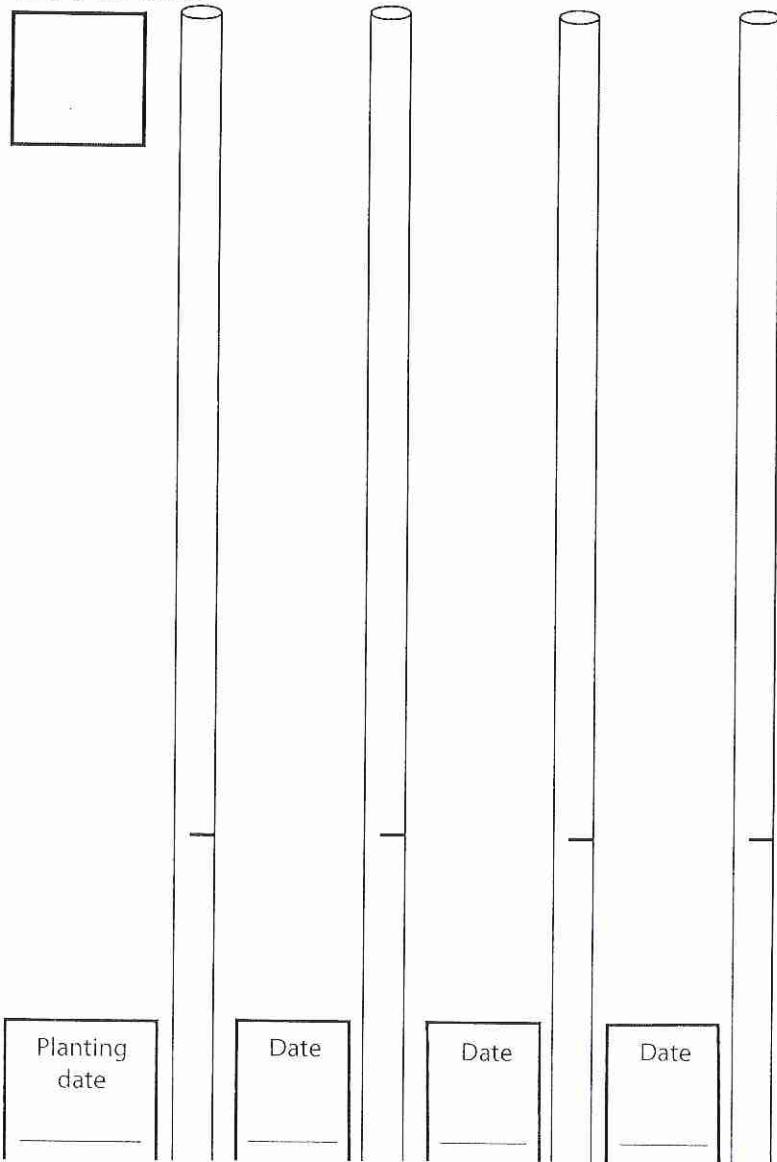
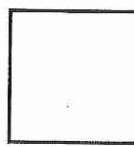
Then: F.Q. How does a



## Growing Wheat

How does a wheat seed grow?

This is the seed.



# 1.3 Write

Date 2/2

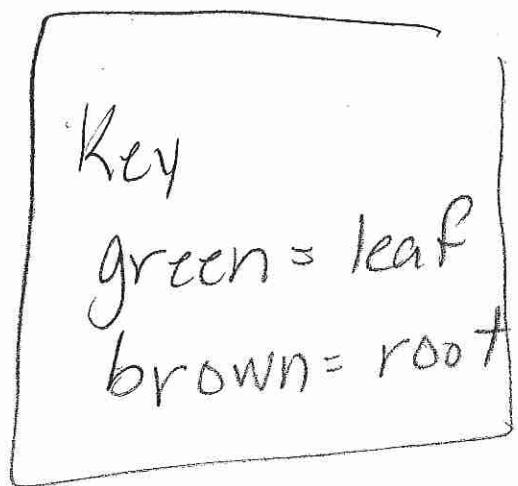
First, we put paper towel in a straw. Next, we dropped the wheat seed in the straw. Finally, we put the straw in a cup of water. I wonder if it will grow because there is no soil.

2/5

I notice the wheat seed is growing roots and a leaf. The root is growing down and the leaf is growing up. This reminds me of how plants grow in the ground (because the roots grow underground).

### 1.3 Active Bar Graph

Student glues construction paper strips used to measure leaf + roots into notebook.



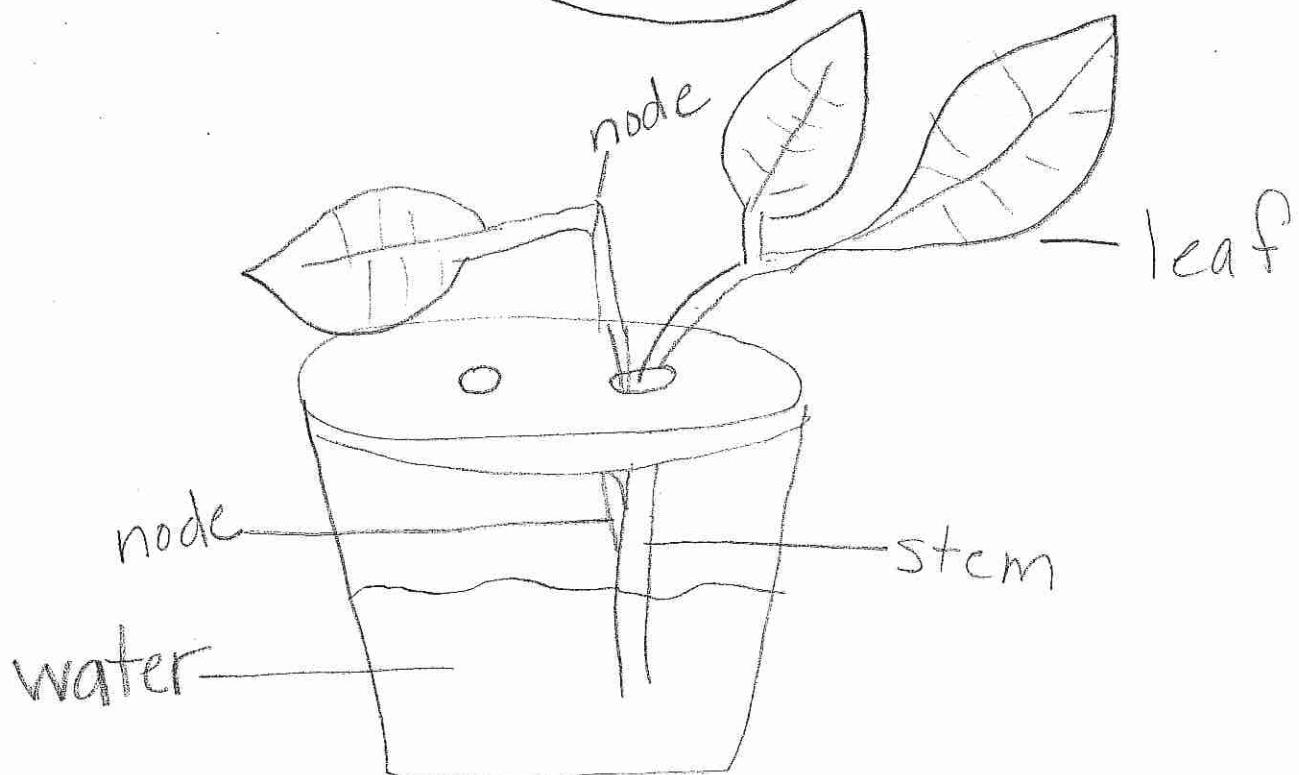
# 1.3 Write

2/9 I noticed that the roots are longer than the leaf.  
My evidence is that my brown paper strip is longer than my green strip. In addition, our class data shows that all of the roots are longer.  
I wonder if we cut the leaf of the wheat if it would keep growing.

2.1 Active

2/9/15

How can we make a new plant  
from an old one?



Pothos

\* teacher tip: might do a fold out  
sheet divided into 3 sections  
for diagrams of change  
over time,

2.1 Write

2/10

I predict that the pothos will grow taller.

---

2/19 My prediction was not accurate.

because the pathos did not grow taller.

I notice that there are black spots growing on the stem in the water. I wonder what will happen to them.

---

2/26 The old plant grew roots

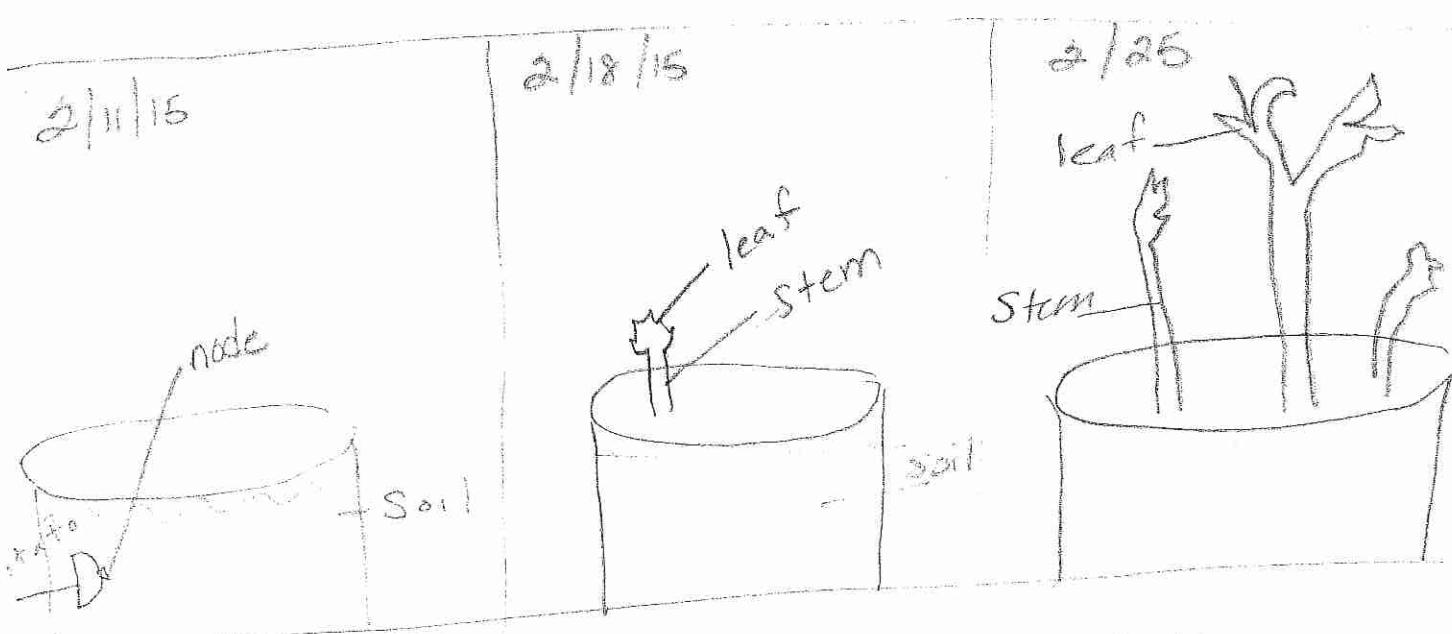
when we put the cutting in water.

## 2.2 Active

What grows from the nodes  
of a potato?

eye  
stem  
tuber

### Growth over time



• node = eye

• thick stem

• optional? sideways • green

• fuzzy

• taller stem

• 3 stems

• different heights

• roots are

long.

## 2.2 Write

2/12/15 First we cut the potato with the node on it. Then, we planted the potato sideways in soil. Last, we watered the potato. I wonder if a potato will grow from the plant.

# 2.2 Class Shared Review 2/25/15

Do a compare and contrast

	grew in soil
roots	leaves
Stems	needs water, nutrients
potato	light
	alfalfa
thick stem	thin stem
Started from node of potato	Started as seed
leaves have tooth edge	leaves round
Strong	fragile

2.2. Write

21/25/1

The potato and alfalfa both need water to grow. In addition, they both have stems.

They are different because the potato has a thick stem but the alfalfa has a thin stem.

31615

### 3.1 Active

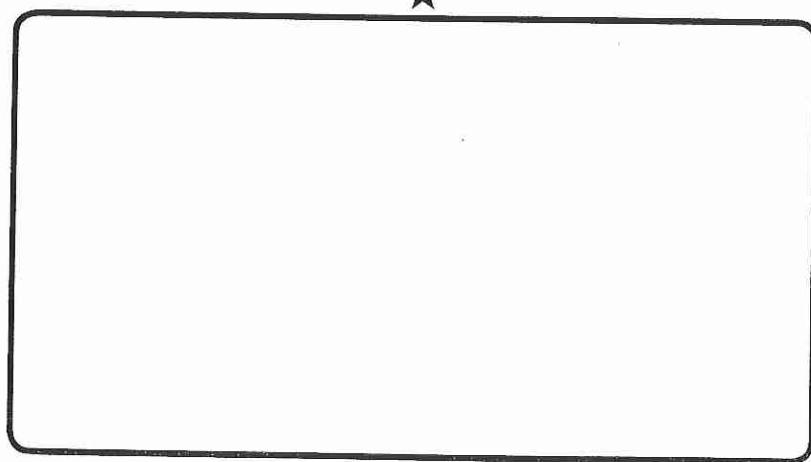
What do plants need to grow in a terrarium?

small garden & plants

Wainwright

## Terrarium Map

## Top view



### 3.1 Writing

3/17/15

We planted seeds in our terrarium. The seeds will need light, water, air, nutrients and space to grow. We give them nutrients by using plant food in the water. In addition, we put the terrarium near the window for light. This reminds me of the ryegrass because we put that next to the window too.

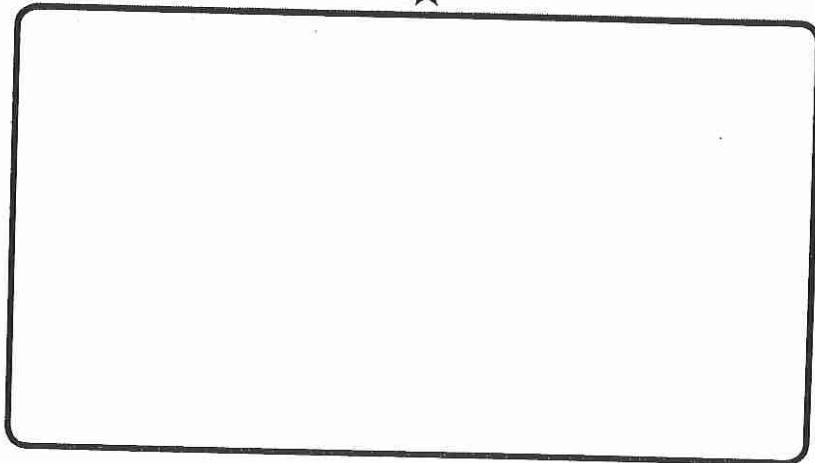
3.2 Active

What changes do you notice in your terrarium?

3/24/15

### Terrarium Map

Top view



Key

W - wetter

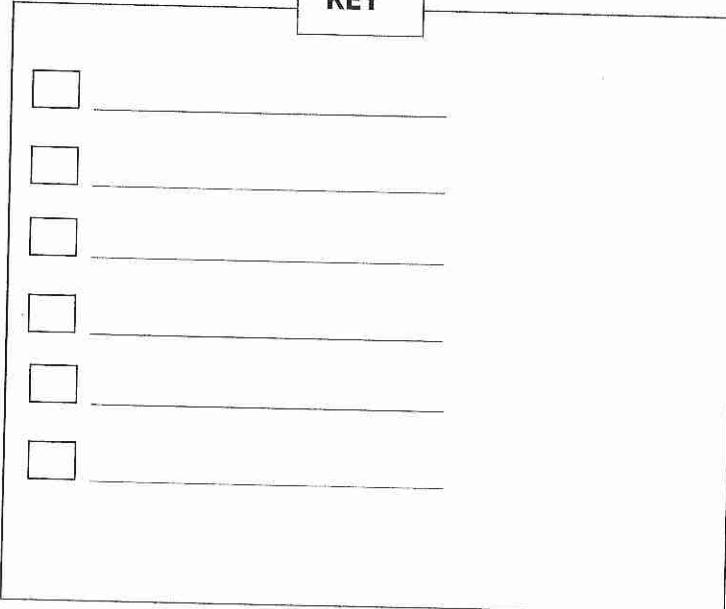
D - drier

I - isopod

S - snail

WM - worm

KEY



## 3.2 Writing

4/1/15

I notice the worm is burrowing in the wet soil. Also, the wheat is getting taller. In addition, I notice the isopod climbs on the grass. I added some sticks for the animals because they may want to hide.

3/9/15

3.3

What structures or behaviors  
do plants or animals have  
that help them live in their  
environment?  
habitat Where they live

Watch Video - How plants live  
in different places.

→ take notes after through  
class share

<u>Plant/Animal</u>	<u>Structure/Behavior</u>	<u>how does it help</u>
Cactus	<ul style="list-style-type: none"><li>long roots close to surface</li><li>no leaves</li></ul>	<ul style="list-style-type: none"><li>get water from rain</li><li>won't lose water</li></ul>
aloe	<ul style="list-style-type: none"><li>stores water in leaves</li></ul>	good for dry

### 3.3 Write about Video

3/10/15

Desert plants have long roots so they can get water from far away. In addition, they grow slowly so they don't need lots of water.

### 3.4 Active

Squirrel Simulation

Make class Chart while  
looking at data from  
game.

3.4 Write

3/15/15

I think more gray squirrels were full in March because they hid their food in lots of places. This is helpful because if another squirrel steals his food, the squirrel know other hiding places.

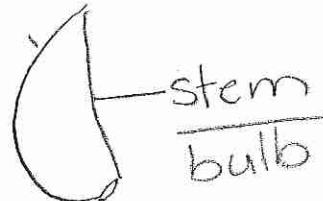
4.1

How does a **bulb** grow?

Short Stem

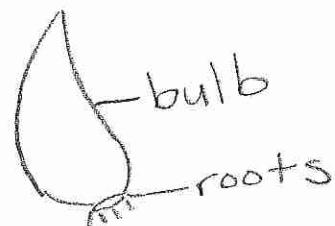
live  
change

- white
- oval
- smells



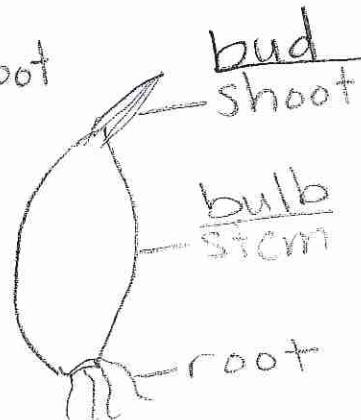
Day 1 4/27/15

- small roots on bottom



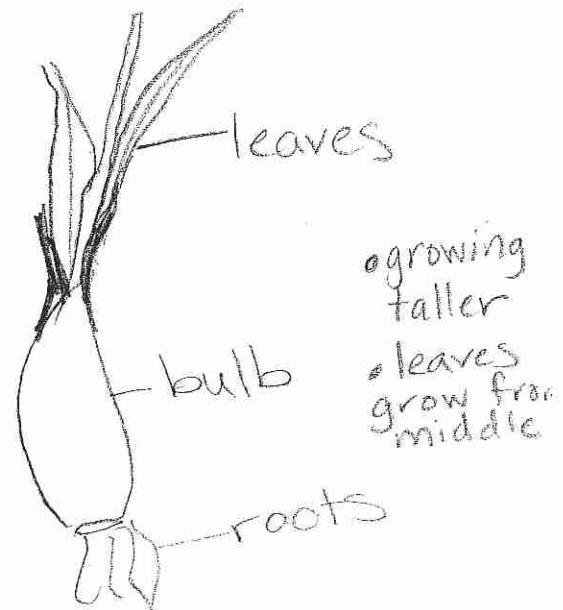
Day 3 4/30/15

- greenish shoot
- roots longer



Day 7 5/4/15

- growing taller
- leaves grow from middle



Day 13 5/11/15

4.1 Write

5/11/15

I notice the roots grew from the bulb first. Next the bud grew from the top of the bulb. Then, the leaves grew from the middle of the bud.

I wonder where the garlic bulbs grow.

4.2 Active

4/28/15

What  
can

parts of the plant  
grow new plants?

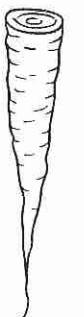
top, middle, bottom

carrot  
radish

### Cutting Roots

Cut the carrot in four parts.

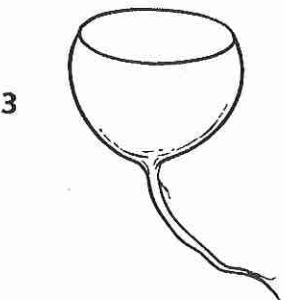
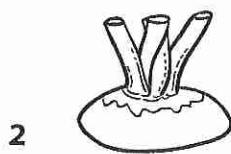
Plant a piece from each part.



### Cutting Roots

Cut the radish in three parts.

Plant a piece from each part.



4.2 Write

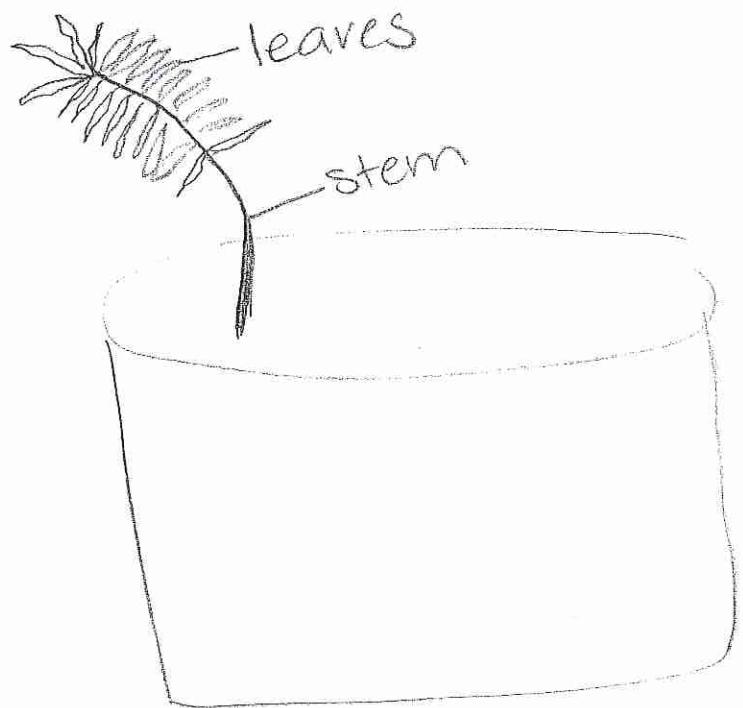
5/13/15

4/29/15 I predict ...

5/13/15 My prediction was/was not accurate  
because ...

## 4.2 Active

What do you notice about how a carrot grows?





4.3

What is the  
Same

My adopted  
plant

(choose one from  
class (ie) potato)

BUT



4.3 Write

Compare and/or Contrast