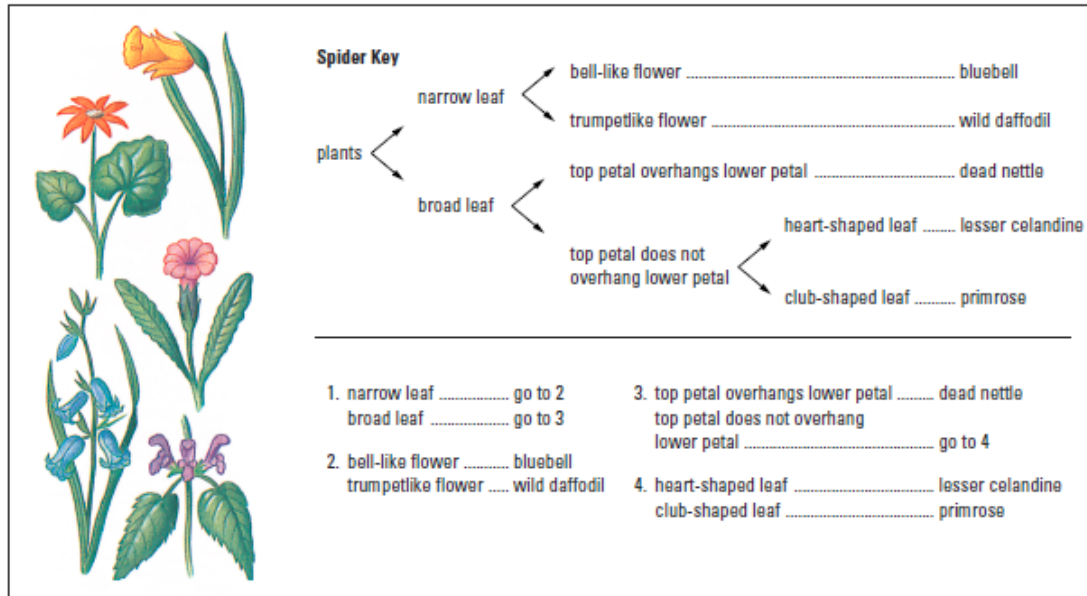**Warm-up Week 8**

Monday

Dichotomous Key A

1. Using the dichotomous key A, which flower has the following characteristics. The leaf is narrow and the flower has a trumpet like shape.

    A. Bluebells
    B. Dead Nettle
    C. Primrose
    D. Wild Daffodil

2. Using the dichotomous key, what are the characteristics of a primrose?

    A. It has a narrow leaf and a bell-like flower.
    B. It has a broad leaf, the top petal doesn't overhang the bottom petal, and it has a club-shaped leaf.
    C. It has a broad leaf and the top petal overhangs the bottom petal.
    D. It has a broad leaf, the top petal doesn't overhang the bottom petal, and a heart-shaped leaf.

Closure

List the 3 parts of a seed with their functions. List the 11 parts of the flower with their function.
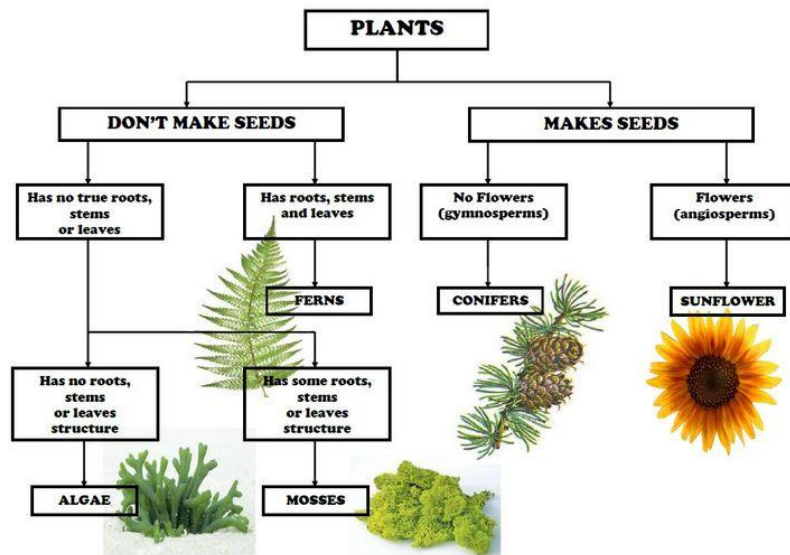
Seed Part & Function
1.
2.
3.

Flower Part & Function
1.   7.
2.   8.
3.   9.
4.   10.
5.   11.
6.

Tuesday

Dichotomous Key B

1. Which plants make seeds and have flowers according to dichotomous key B?

    A. Conifers
    B. Gymnosperms
    C. Mosses
    D. Angiosperms

2. According to dichotomous key B, mosses have the following characteristics?

    A. It is a plant that doesn't make seeds, and has roots, stems, and leaves.
    B. It is a plant that makes seeds and no flowers.
    C. It is a plant that doesn't make seeds, has no true roots, stems, leaves, and no roots, stems and leaves structure.
    D. It is a plant that doesn't make seeds, has no true roots, stems, leaves, and has some roots, stems and leaves structure.

Closure

List 2 characteristics of each of these plant groups.

Vascular Plants =
Nonvascular Plants =
Spore Producing Plants =
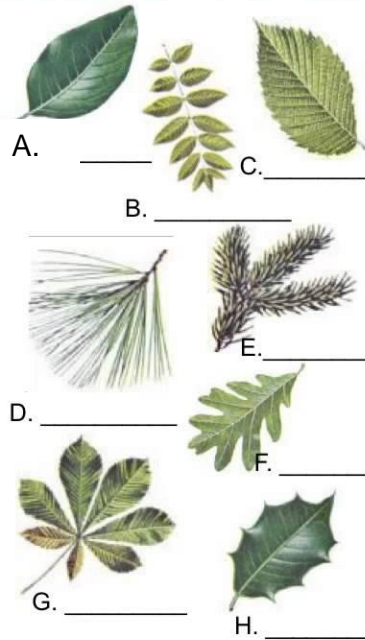Seed Producing Plants =
Cone Bearing Plants =
Flowering Plants =

Wednesday

Dichotomous Key For Leaves

1.	a. Needle leaves	go to 2
	b. Non-needle leaves	go to 3
2.	a. Needles are clustered	Pine
	b. Needles are in singlets	Spruce
3.	a. Simple leaves (single leaf)	go to 4
	b. Compound leaves (made of "leaflets")	go to 7
4.	a. Smooth edged	go to 5
	b. Jagged edge	go to 6
5.	a. Leaf edge is smooth	Magnolia
	b. Leaf edge is lobed	White Oak
6.	a. Leaf edge is small and tooth-like	Elm
	b. Leaf edge is large and thorny	Holly
7.	a. Leaflets attached at one single point	Chestnut
	b. Leaflets attached at multiple points	Walnut

A. _____
B. _____
C. _____
D. _____
E. _____
F. _____
G. _____
H. _____

Dichotomous Key C

1. Use dichotomous key C to classify leaf G.

   A. Magnolia
   B. Elm
   C. Chestnut
   D. Walnut

2. Use dichotomous key C to classify leaf A.

   A. White Oak
   B. Elm
   C. Spruce
   D. Magnolia

Closure

List 6 characteristics and one example for monocots and dicots.

Monocotyledon   Dicot

1.	4.	1.	4.
2.	5.	2.	5.
3.	6.	3.	6.
Ex.		Ex.	

Thursday

Dichotomous Key D

Picture A

1a.	The bean is round.	Garbanzo Bean
1b.	The bean is oval-shaped.	Go to step 2
2a.	The bean is dark-colored.	Go to step 3
2b.	The bean is light-colored.	White Northern
3a.	The bean has spots.	Pinto Bean
3b.	The bean does not have spots.	Go to step 4
4a.	The bean is black.	Black Bean
4b.	The bean is reddish-brown.	Kidney Bean

1. Use dichotomous key D & picture A to classify the bean.

   A. Kidney Bean
   B. Pinto Bean
   C. Garbanzo Bean
   D. Black Bean

2. Dichotomous key D and picture B are used to classify beans what are the characteristics of a white northern bean?
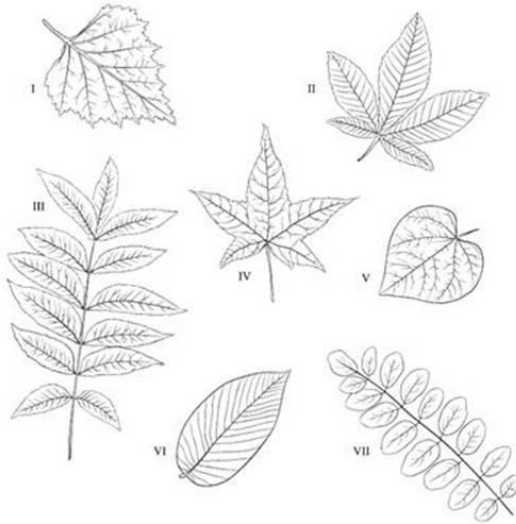

Picture B

   A. The bean is round.
   B. The bean is oblong-shaped (oval-shaped), dark-colored, & has spots.
   C. The bean is oblong-shaped, & light colored.
   D. The bean is oblong shaped, dark-colored, doesn't have spots, & is reddish-brown in color.

Closure

Define sexual reproduction and list one example of it. Define asexual reproduction and list the six types with an example.

Friday

Dichotomous Key E

Dichotomous Key for Leaves
1. Compound or simple leaf
    1a) Compound leaf (leaf divided into leaflets)
    ....go to step 2
    1b) Simple leaf (leaf not divided into leaflets)
    ....go to step 4
2. Arrangement of leaflets
    2a) Palmate arrangement of leaflets (leaflets
    all attached at one central point)
    ....*Aesculus* (buckeye)
    2b) Pinnate arrangement of leaflets
    (leaflets attached at several points)
    ....go to step 3
3. Leaflet shape
    3a) Leaflets taper to pointed tips
    ....*Carya* (pecan)
    3b) Oval leaflets with rounded tips
    ....*Robinia* (locust)
4. Arrangement of leaf veins
    4a) Veins branch out from one central point
    ....go to step 5
    4b) Veins branch off main vein in the middle
    of the leaf................................go to step 6
5. Overall shape of leaf
    5a) Leaf is heart-shaped........*Cercis* (redbud)
    5b) Leaf is star-shaped
    ....*Liquidambar* (sweet gum)
6. Appearance of leaf edge
    6a) Leaf has toothed (jagged) edge
    ....*Betula* (birch)
    6b) Leaf has untoothed (smooth) edge
    ....*Magnolia* (magnolia)

1. Identify leaf VII using dichotomous key E.
    A. *Aesculus* (buckeye)
    B. *Carya* (pecan)
    C. *Robinia* (locust)
    D. *Magnolia* (magnolia)

2. Identify leaf V using dichotomous key E.

    A. *Cercis* (redbud)
    B. *Liquidambar* (sweet gum)
    C. *Betula* (birch)
    D. Magnolia (magnolia)

Closure

Explain germination, pollination, and fertilization in three sentences.