Structures of Life Investigation 1 Study Guide

Write YES or NO next to each food to tell if it is a fruit.

Is it a fruit?

1.__Y__ tomato   4.__Y__corn on the cob

2.__N__ carrot   5.__Y__strawberry

3.__N__celery   6.__N__potato

7. What is the function of the fruit in a plant? _____The function of the fruit is to protect the seeds_____

8. Name 4 ways seeds get dispersed. __wind_____, _____water_____,
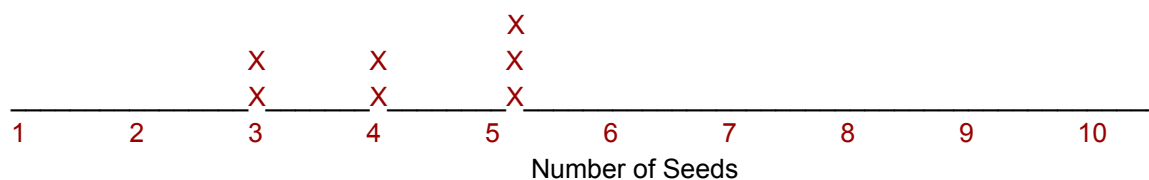
_____birds_____, _____squirrels_____

9. Why is it important for seeds to be dispersed away from the parent plant? ____It is important so new plants don't have to compete with the parent plant for basic needs like water, sun, nutrients from the soil._____

10. Traits are inherited from the parent to the baby. That's why the baby looks like the parent plant. If a rose plant produces red roses, what color would the baby roses be? _____red_____

11. Use the data table below to make a line plot showing the number of seeds inside pea pods.

Pea Pod	Number of Seeds
1	5
2	3
3	3
4	5
5	4
6	5
7	4

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                           X
          X         X      X
_____X_____X_____X_____
1      2      3      4      5      6      7      8      9      10
                      Number of Seeds
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12. What was the most common number of seeds they found in the pea pods? ____5___

13. If you opened another pea pod, how many seeds would you expect to find? ___5___

14. Plants of the same type look a lot alike, but they can also vary (look different) in many ways. Put an X next to all the ways plants of the same type can vary.

__X__ Size of leaves on the plant   __X__ Number of seeds produced   _____ root type   _X___ how tall the plant grows

15. A group of students drew models of seeds they were observing in a seed sprouter.

Apple seed   Soybean seed   Avocado seed   Tomato seed

Write S next to each phase that shows something that is the same about all of the seeds. Write D next to each phase that shows something that is different.

__D__ Shape of the seeds   __D__ Size of the seeds   _S___ Cotyledon provides food

__S__ Embryo in the seed grows into a new plant

16. Draw a picture of a lima bean seed. Label the cotyledon and embryo. Then explain what is the first thing that will happen when the seed is soaked in water. Make sure to explain what structure would develop first and why.

The first part that will develop is the root so that it can soak up the water for the new plant.