SCIENCE Newsletter

Week of : Mar.11th to Mar 15th, 2024

STEM

	4A,B,C,D,E Home Learning
Monday	Read and answer the questions on page 2 of the "**Seeds, Plants, Pollination and Reproduction**"
Tuesday	Answer the questions on page 3 of the "**Seeds, Plants, Pollination and Reproduction**"
Wednesday	Complete page 4, the **Plant Reproduction Crossword**.
Thursday	Complete any unfinished work and upload on Archie.
Friday	**No H/W enjoy your Weekend :)**

Vocabulary
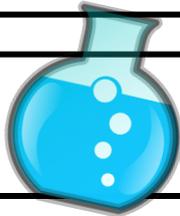
flower
sepal
pistil
stamen
ovary
egg
fruit
reproduction
pollen
pollination
pollinators

fertilization
seed
germination
seed dispersal
plant life cycle
flowering
nonflowering
plant
function
ovules

Reminders

➢ **Homework is due Friday 03/15**
➢ **Vocabulary Quiz on Thursday 03/14**
➢ **Topic 6 Lesson 1 Quizlet Vocabulary**

Name:_____

Seeds, Plants, Pollination, & Reproduction

Some living things help other living things carry out reproduction. Reproduction is the process of making more of one's own kind. A flower has several key parts. The male organ of the flower is called the stamen. Stamens produce a sticky yellow powder. This is called pollen. The female organ of the flower is called the pistil. The top of the pistil is called the stigma. It is often sticky. It is sticky because it needs to capture pollen. Seeds are made at the base of the pistil. They are made in the ovule.

Many plants reproduce by making seeds. The process of pollination occurs when pollen is moved from the male to the female parts of the flower. Some plants pollinate themselves. Other plants need pollen from nearby plants. Pollination is a plant's version of fertilization. Fertilization is when male and female reproductive cells are brought together to begin a new life. Pollen must move from one part of the flower to another part, or from one flower to another flower, to make seeds. How does pollen move? Wind and water can carry pollen. Animals such as insects and birds can carry pollen as well. An animal that assists plants in making seeds is defined as a pollinator.

Why do bees love flowers so much? Flower pollen is food for bees. Bees use large quantities of it to feed their babies. Bees grow at a quick rate. They need lots of food to compliment their quick growth. Bees also use pollen to build their homes. It is an essential product for them. Bees are often observed hovering around flowers. Pollinators use pollen as food. They carry pollen from flower to flower. Pollen touches the right part of the flower and as an effect, seeds begin to form.

There are many different ways that pollen gets moved from the stamen to the pistil. Animals move pollen. Humans transfer pollen from one flower to another sometimes. Most plants are pollinated without any help from humans. Usually plants need animals or the wind to pollinate themselves. Seed dispersal is the scattering or carrying away of seeds from the plant. Some plant seeds get caught in the fur of animals. These seeds may be carried a long way before falling off.

Plants are pollinated accidentally at times. Bees and butterflies can accidentally pollinate plants. Butterflies and moths can accidentally pollinate plants. Flies and hummingbirds pollinate plants can accidentally pollinate plants. These animals can be observed at the plant to get food. They want the sticky pollen. They desire the sweet nectar that is made at the base of the petals. Animals accidentally rub against the stamens while they are feeding. The animals get pollen stuck all over themselves. They move to another flower to feed. Some of the pollen can rub off onto each new plant's stigma. The pollen then travels through the stigma. They then move down into the pistil. This is called an interdependent relationship. This is because the bees get to eat. The flowering plants get help reproducing. It is not always animals that carry the pollen. Nature has other ways to get the job done. Wind can move pollen. Rain can carry pollen. Grains of pollen can be carried hundreds of miles. They are carried by wind or water.

Different types of plants have different seeds. Some flowers enlarge and turn into fruit after they are pollinated. The fruit has seeds inside of it. The skin and flesh of the fruit protect the seeds. Some fruits have one seed. An example of this is a nectarine. Others have a couple of seeds. Examples of this is apples or oranges. Strawberries have their seeds on the outside of their skin. No new plants would be created without seeds. New plants sprout all the time due to pollination. Some plants grow fruit. Seeds form inside the fruit. Animals eat the fruit. They drop the seeds or leave them in their waste. The seeds will grow if the seeds fall where conditions are right. There has to be the correct amount of air. There needs to be the right amount of water and sun.

Some people can be allergic to pollen. Plants release pollen into the air during the spring, summer and fall seasons. The pollen is picked up by the wind. The wind brings it to other plants for fertilization. Some people are allergic to this pollen. Being allergic causes sneezing. People have a runny nose and itchy eyes. This is the human body's response to breathing in something that is actually harmless. The human body releases mucus from the nose and mouth to protect itself and eliminate it's "waste."

Name:_____

Seeds, Plants, Pollination, & Reproduction

1. What is supposed to happen when seeds fall under the correct conditions?
    a. Nature intends for the seed to sprout on its own.
    b. With the correct amount of air, water, and sun, the seeds will grow.
    c. With the correct amount of carbon dioxide and good soil, the seeds will grow.
    d. The seed will be carried away by an animals.

2. What is a problem with pollen?
    a. Bees use it to feed their babies.
    b. Plants are pollinated without help from humans.
    c. When animals pollinate plants, it is accidental.
    d. Many humans are allergic.

3. Which is NOT a way that animals move pollen?
    a. Bees carry it.
    b. The pollen is rubbed on the animal's mouth or nose.
    c. Animals give it to people to pollinate artificially.
    d. It is sometimes caught in animal fur.

4. What is reproduction?
    a. When pollen is moved from the male to the female parts of the flower
    b. The process of plant fertilization
    c. The process of making more of one's own kind
    d. Growing from a seed into a plant

5. What is fertilization?
    a. When male and female reproductive cells are brought together to begin a new life.
    b. Joining plant and animal cells together to pollinate
    c. The process of making more of one's own kind
    d. Growing from a seed into a plant

Seeds, Plants, Pollination, & Reproduction

Name:_____

1. Describe several examples of the locations of seeds from their fruit.

2. Why do bees love flowers so much?

3. How can the wind and rain move pollen?

4. Describe the process of pollination that includes bees.

5. Draw a picture of a flower and label and describe its parts.

Directions: Why are bees an important part in the process of pollination? Why should we care for bees? What might happen if they went extinct? Use evidence from the text to support your answer.

NAME_____
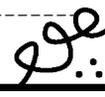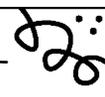
Plant Reproduction, Growth and Lifecycle's
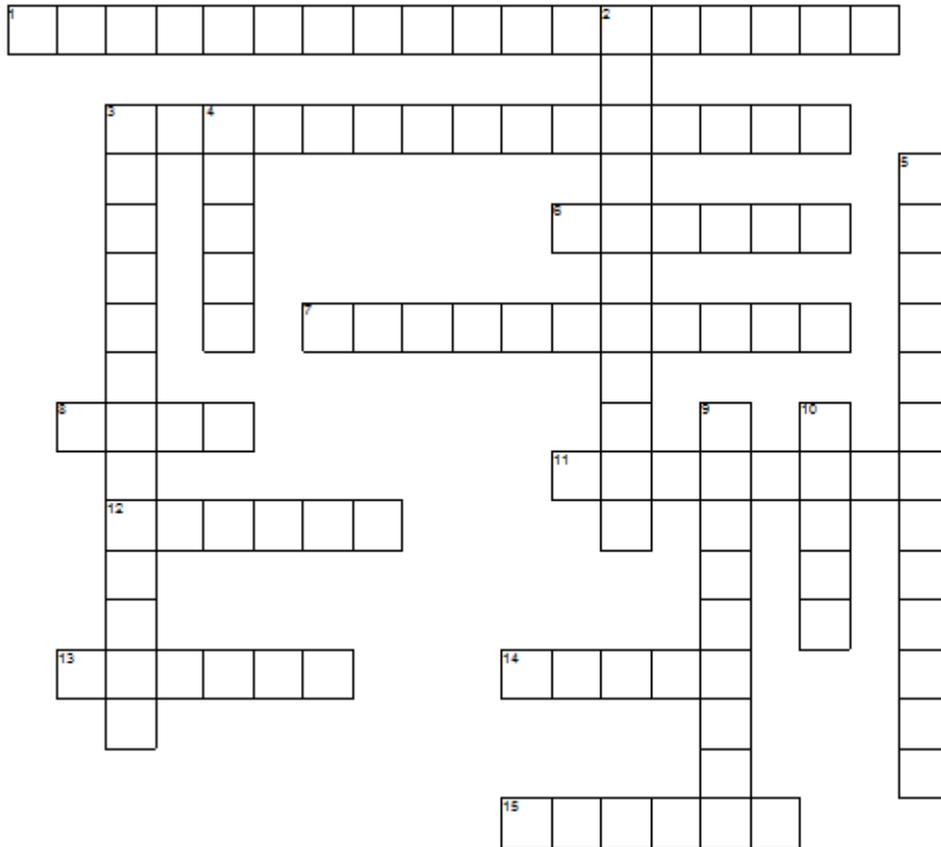
ACROSS

1 Plants that produce seeds in cones or spores
3 Plants that produce seeds in flowers
6 The female part of the flower
7 The sprouting of a plant from a seed, "begins growing"
8 Some seeds are light and have hairs or wings that help them to be carried along by this
11 Plants that use cones to protect and disperse their seeds
12 The head of the stamen where pollen is produced
13 The main function of the stamen is to produce this
14 This organ holds the ovules
15 The male organ of the flower

DOWN

2 The movement of pollen from the stamen to the pistil
3 The pollen tube releases a sperm cell that is joined to the egg in the ovule.
4 This flower structure becomes the seed
5 The transport of seed from one location to another
9 All the stages a living organism goes through as it grows and reproduces
10 Used to attract insects and other creatures to the flower to aid in pollination