

GERMINATION

Directions: Read the following paragraphs and use a highlighter or underline with a pencil the most important information. After you are finished, answer the questions below.

A seed is a young plant that is enclosed in a protective covering. Inside the coating, there are enough nutrients to enable the plant to grow. This young plant is called an embryo. It is protected by a seed coat until the conditions are right for it to grow.

An embryo can remain inside a seed for a long time without growing. When the seed has enough sunlight, moisture, temperature, and other conditions are right, it will start to grow. Germination (jur-muh-NAY-shuhn) is the beginning of growth of a new plant from a spore or a seed. If you've ever planted a seed that sprouted, you've observed germination.

When a seed germinates, it takes in water from its surroundings. As the embryo begins to grow, it used the stored nutrients (cotyledons) in the seed for energy and materials. The nutrients need to last until the new plan'ts roots and shoots can start to function.

- 1. What is an embryo?**
- 2. How is the embryo protected?**
- 3. How long will embryo stay protected?**
- 4. What are the conditions necessary for the embryo to start growing?**
- 5. What is germination?**
- 6. How does the seed get water when it starts to germinate?**
- 7. How does the embryo get energy as it starts to grow?**
- 8. How long do the stored nutrients inside the seed have to last?**
- 9. What has to start to grow from the embryo in order for it to get nutrients from the soil?**
- 10. Draw a comic explaining the stages of germination in the boxes below as a cartoon.**

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By: _____				The End!