WORKSHEET

STRUCTURE AND FUNCTION OF PLANT

STUDENT NAME	
CLASS	

LEARNING OBJECTIVES

3.4. Analyzing the interrelationships of plant tissue structures and their functions, as well as technologies inspired by plant structures

INDICATORS OF ACHIEVEMENT OF LEARNING OBJECTIVES

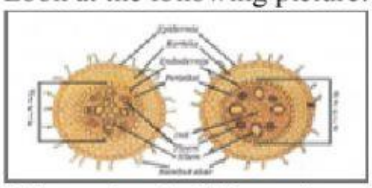
3.4.5. Identify the function of tissues in plants
3.4.6. Identify the structure of tissues in plants
3.4.7. Analyzing the use of technology contained in the structure of plant tissue

Perhatikan video di bawah ini dan kerjakan soal-soal dibawahnya!

LIVEWORKSHEETS

Fill in the answers to the questions that have been prepared correctly!

1. Aquaporin channels are (channel proteins) that can only be passed by air, so other particles cannot enter. This tool is similar to technology…
   a. Hydroelectric power plant
   b. Water Purifier
   c. Ecohydrology
   d. Ultra Filtration
2. This process requires light and a green substance called chlorophyll. Through this process, oxygen and glucose are produced. When exposed to light, chlorophyll will absorb light energy. The electrons in the chlorophyll complex will move through a channel and cause a positive charge to move along. The positive charge then moves towards the enzyme complex which functions to produce chemical energy in the form of ATP and NADPH. This ATP and NADPH energy will then be used to convert CO2 into glucose. Which technology was inspired by the above process…
   a. Solar panels are devices that can convert sunlight into electrical energy.
   b. The light sensor is known as a photoresistor or light-dependent resistor (LDR).
   c. Air filter or purification technology.
   d. Solar power plant.
3. In this tissue consists of branched cells that are irregular in shape. These cells have a variety of shapes. Typical of this tissue there are cavities or lobes that exist between cells with one another. Which is a function of the network is…
   a. A temporary storage place for oxygen products in the form of oxygen gas
   b. Transport on leaves
   c. Photosynthesis site
   d. Food storage
4. Here is part of the stem!
   1) Bundle type of cortical vessels is open.
   2) Curved leaf bones
   3) Has a cork cambium
   4) The structure of young and old stems is the same
   Which of the following is part of the monocotyledonous plant, number...
   a. 1) and 2)
   b. 2) and 3)
   c. 3) and 4)
   d. 4) and 1)
5. Look at the following picture!



   What makes it different from the picture above?
   a. Monocot plants have a primary phase. While the type of dicotyledonous plants has a growth phase.
   b. Monocot plants have a growth phase of growth. While the type of dicotyledonous plants has a primary phase.
   c. Both have adventitious systems
   d. Monocot plants are vascular ambium and dicot plants are cork cambium

LIVEWORKSHEETS

Fill in the answers to the questions that have been prepared correctly!

6. Pay attention to the statement below!
   1) The fruit serves to wrap and protect the seeds contained in it.
   2) Fruit serves to provide food reserves during the pollination process.
   3) Fruit serves as a source of nutrition that will be consumed by humans and animals.
   Determine which is a function of fruit...
   a. 1) and 2)
   b. 2) and 3)
   c. 3) and 1)
   d. 1)
7. Seeds will reach the highest physiological quality when they reach physiological maturity which occurs when...
   a. The filling of dry matter into the seeds stops.
   b. Filling the dry ingredients into the seeds.
   c. The filling of wet material into the seeds stops.
   d. Filling the wet ingredients into the seeds.
8. The Fruit formed from the growth of the Future… which is followed by the parts of the Flower, but the parts of the Flower, are not the main component parts in the formation of the Fruit itself. What is the answer to the dots from the above understanding?
   a. Root
   b. Fruit
   c. Seed
   d. Fruits and seeds
9. What is the process of pollination...
   a. Attaching the pollen to the pistil, the two cells will become the vegetative nucleus and the generative nucleus. The vegetative nucleus under the generative nucleus makes a channel for the generative nucleus to the ovary sac
   b. Attaching the pistil to the anther, the two cells will become the vegetative nucleus and the generative nucleus. The vegetative nucleus under the generative nucleus makes a channel for the generative nucleus to the ovary sac
   c. Attaching the pollen to the pistil, the two cells will become the vegetative nucleus and the generative nucleus. The generative nucleus under the vegetative nucleus makes a channel for the vegetative nucleus to the ovary sac
   d. Attaching the pistil to the anther, the two cells will become the vegetative nucleus and the generative nucleus. The generative nucleus under the vegetative nucleus makes a channel for the vegetative nucleus to the ovary sac
10. Flowers are a means of sexual reproduction. A flower is said to be complete if it has...
    a. Petals, corolla, stamens, and fruit leaves.
    b. Petals, corolla, pistil, and fruit leaves.
    c. Petals, corolla, stamens, pistils, and fruit leaves.
    d. Petals, stamens, pistils, and fruit leaves.

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