Lesson Plants

Section 1 Introduction

Plants are organisms. An organism is anything that is alive. Life is what all organisms share.

How each kingdom obtains its food

Animals via internal digestion

Fungi via external digestion

Plants via photosynthesis //photosynthetic

Plants are _____. So are animals and fungus. An organism is _____. Organisms are categorized into separate taxonomic classifications based on their biology. _____ is the study of living things. Biology further divides into specialized fields based on the aspects of organisms. There is structure (morphology,) function (physiology,) behavior (psychology,) habitat (biogeography) and relationships (ecology). These studies are used to group and divide

organisms based and shared characteristics. _____ is the science of classifying living things. The categories that group and divide organisms are called _____. The taxa are.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____

Here is a mnemonic device to help you remember the taxa. Lets, Do, Keep, Parties, Categorized, Orderly, For, Great, Success. Plants (_____,) animals (animalia,) and fungus (fungi) are all contained in the taxa of kingdom.

Each kingdom is different. Plants are different from animals in 8 key ways.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____

Section 1 Review

What is an organism?_____

What is biology? _____

What is taxonomy? _____

What are taxa? _____

What is a kingdom?_____

_____

What is the plant kingdom called? _____

What taxa does plantae belong to? _____

In what 8 ways are plants different from animals?

1. _____
2. _____
3. _____
4. _____
5. _____

6. _____

7. _____

8. _____

Section 2 Plant Anatomy

_____ are scientific terms for the body. Anatomical structure, anatomy, and a body all mean the same thing. Plants have _____ from animals. Their anatomy is different. Animals like us have a mouth to eat, a nose to smell, eyes to see, ears to hear. We use our brains to think, our lungs to breath, our stomach to digest, and our butts to poop. We also have limbs with feet to run and hands to grab. Plants don't have any of these things. In fact, _____ _____. Their bodies are completely different.

The parts of organisms are called _____. Each organ _____. Our hearts pump blood throughout our

bodies while our skin keeps everything inside and prevents harmful things from entering our bodies. Plants have their own anatomy with their own set of organs that perform functions different from animals.

The 8 key parts of plant anatomy are.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____

_____. However not all plants are the same. _____, While _____. _____. Plants vary

in many different ways just like animals. Just like how some animals have feet and other ones have fins, plants also express anatomically in different ways. Plants might not share all the same organs as other plants, but they always share the same types of organs with other plants. Plants do not share any of the same types of organs with animals.

_____.

Section 2 Review

What is anatomy? _____

Do plants share any of the same body parts as animals? _____

What is an organ? _____

Do plants and animals have the same organs? _____

What are 8 parts of plant anatomy?

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____

Do all plants flower? _____

Do all plants produce seeds? _____.

Do all plants have roots? _____.

Do plants share the same types of organs with animals?_____

_____

Section 3 Plant Sensation

Organisms have senses that _____ _____. We have our own senses, sight, hearing, taste, smell, and touch. These stimuli determine how we experience reality. Plants have their own set of senses. _____ _____like we do. They perceive and interact with the world in a different way. Plants respond to electrical, chemical, and hormonal signals. Plants can sense.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____

Section 3 Review

What do senses do? _____.

_____

Do plants have a nervous system? _____

What kind of signals do plants respond to? _____

_____

What 7 things can plants perceive?

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

7. _____

Section 4 Plant Growth

Plants grow in their own way different from animals. Animals have a _____ growth. An animal will grow from a baby animal into an adult animal. Once it reaches adulthood it stops growing. Animals have a set number of limbs. They can't continuously grow limbs. Although some animals do regrow lost limbs to replace them they never grow extra limbs.

Plants have _____ growth. _____ _____. They continuously grow throughout their entire lives. Plants can _____ _____.

Section 4 Review

What kind of growth do animals exhibit? _____

What kind of growth do plants exhibit? _____

What is indeterminate growth? _____

_____

Is there a set number of branches, leaves, or flowers that plants can grow? _____

Section 5 Plant Mobility

Plants can move but they _____. Animals have skeletons and muscles with joints and tendons. Which helps them run, crawl, swim and fly. Animals need to hunt, forage, and scavenge for food.

Plants _____. They get their energy from the sun. So plants move in a much slower and more subtle way. They don't

have to run or climb. They only need to move enough to track the sun.

Plants don't have muscles, bones, joints or tendons.

Plants move by responding to stimuli such as light (_____)

gravity (_____) and touch (_____).

Section 4 Review

Can plants move? _____

Can plants move like animals? _____

Do plants have bones? _____

Do plants have muscles? _____

Do plants have tendons? _____

What is a response to light? _____

What is a response to gravity? _____

What is a response to water? _____

What is a response to touch? _____

Section 5 Plant Metabolism

Animals catch and eat their food to produce energy. However plants can't run, walk, or crawl like animals do. Plant's are usually rooted to one spot their entire lives. Plants need to produce energy in a different way. _____ _____ and turn it into energy through a process called _____. Plants don't usually eat, although some plants like flytraps, sundews, and pitcher plants do catch and "eat" prey. These types of plants are called _____.

Section 5 Review

How do plants produce energy? _____.

What is it called when plants make energy from the sun? _____

What are plants called that can “eat?” _____

What are three carnivorous plants? _____

Section 6 Plant Respiration

Respiration in people is the movement of air into and out of the lungs.

In plants

_____

_____. Plants absorb _____ _____ to create _____. Then, it breaks the glucose down, and this process gives off energy that the plant can use to grow taller, make flowers, and even repair itself if it gets hurt.

This process doesn't only create sugar but as a result also creates oxygen as a bi product. We breathe in oxygen and breathe out carbon dioxide. _____. Making our relationship with plants a closed system.

Section 6 Review

What is respiration in plants? _____

What is glucose? _____

What do plants need to create glucose? _____

_____

What do plants take in during respiration? _____

What do plants release during respiration? _____

Section 7 Plant Reproduction

_____ is the process living things use to create copies of themselves. People produce babies. Birds, lizards, frogs, fish, and bugs produce eggs. Plants produce seeds.

A seed is formed when _____ from a _____ reaches a _____

and travels to its ovule. The _____ becomes a

_____

Plants have _____.

_____ plants are either male or female.

_____ plants have both male reproductive organs (stamens) and female reproductive organs (pistils) on the same plant.

_____ plants have both male and female reproductive organs on the same flower. _____ plants change in between the genders based on environmental conditions.

Section 7 Review

What is reproduction? _____

_____

How do plants reproduce themselves? _____

What is pollen? _____

What is the male sex organ of a plant? _____

What is the female sex organ of a plant? _____

What is an ovule? _____

What is a zygote? _____

What are the 4ish different plant genders?

1. _____
2. _____
3. _____
4. _____

Section 8 Plant Life Cycles

For most vascular plants such as angiosperms. Life begins as a seed. It also usually ends with creating new seeds. _____

_____

_____

_____.

_____

_____.

_____

_____.

Section 8 Review

What are the three different life cycles of angiosperms? _____

_____

What is an annual? _____

_____

What is a biannual? _____

_____.

What is a perennial? _____

_____.