SOILS

Soil is an essential component of the earth's surface, and it plays a vital role in supporting plant growth and sustaining life. There are different types of soil, and each type has its unique characteristics that make it suitable for specific purposes. The four main types of soil are clay, sand, loam, and silt.

Clay soil is dense and heavy, and it retains water well. However, it can become compacted and challenging to work with when it dries out. Sand soil is made up of large particles and drains quickly, making it unsuitable for growing most plants. Loam soil is a combination of sand, silt, and clay, and it provides a balance of drainage and water retention. This type of soil is ideal for growing many types of plants.

Silt soil is smooth and silky to the touch, and it is made up of fine particles. It is often found near riverbeds and floodplains and is rich in nutrients. However, it is susceptible to erosion and can be easily washed away by water.

Erosion is a natural process that occurs when soil is moved from one place to another by wind or water. When the soil is eroded, it loses its fertility and can no longer support plant growth. To prevent soil erosion, it is essential to protect the soil by planting trees and other vegetation, building terraces, and using cover crops.

The particles in soil play a crucial role in determining its properties and suitability for different purposes. Soil particles are classified into three categories: sand, silt, and clay. The size of the particles determines how much water the soil can hold and how well it drains.

In conclusion, understanding the different types of soil, erosion, and soil particles is crucial for anyone interested in agriculture or gardening. By learning about these topics, we can better care for our soil and ensure its sustainability for future generations.

1. WHICH IS THE BEST TITLE FOR THE TEXT?

1. The Importance of Understanding Soil Types, Erosion and Soil Particles

2. Different Ways to Build Terraces in Your Garden

3. How to Turn Sand into Fertile Soil

2. MATCH WORDS TO DEFINITIONS:

1. sand
2. coarse particles
3. clay
4. alluvial soil
5. fine particles
6. silt
7. topsoil erosion
8. to drain quickly
9. to compact soil
10. fertile soil
11. to retain water
12. erosion
13. rich in nutrients
14. loam
15. particles

Definitions:

a. to hold onto moisture, preventing it from evaporating or draining away quickly

b. to allow water to flow through easily without being held back or absorbed

c. containing high levels of vitamins, minerals, or other substances that are beneficial for plant growth

d. larger pieces of matter, such as those found in sand or gravel

e. soil that contains nutrients necessary for plants to grow well

f. the process of wearing away soil or rock due to natural forces such as wind or water

g. tiny pieces of matter that make up soil, air, or other substances

h. soil that has been deposited by flowing water, often found near rivers or streams and known for its fertility.

i. a type of soil made up of small grains of rock, commonly found on beaches or in deserts

j. the loss of the upper layer of soil due to factors such as wind or water, which can lead to decreased fertility and plant growth

k. to press down on soil, making it more dense and less able to absorb water or support plant growth

l. a type of soil that is a mixture of sand, silt, and clay, which allows it to retain water while also draining well

m. a type of soil that is sticky and can be molded into different shapes when wet, often used for making pottery or bricks

n. very small pieces of matter, such as those found in clay or silt

o. a type of soil made up of very fine particles, smaller than sand but larger than clay, often deposited by rivers or floods

3. COMPLETE THE SENTENCES WITH THE WORDS FROM THE PREVIOUS EXERCISE:

1. I molded a vase out of _____.

2. We built a sandcastle at the beach.

3. _____ is a good soil for growing vegetables.

4. The river delta was made up of _____deposits.

5. _____ is causing the hills to slowly disappear.

6. The soil is made up of small _____ that are hard to see.

7. Sponges are able _____ well.

8. The rain seemed _____ off the pavement.

9. The _____ in the air made it hard to breathe.

10. The _____ in the sandpaper smoothed the wood.

11. _____is ideal for planting crops.

12. _____ is a major problem for farmers.

13. The_____ pile is rich in nutrients that plants need.

14. You can _____ soil by stomping on it repeatedly.

15. The _____ soil near the river is very fertile.

4. WORD CLASSES: Use the word in parenthesis as a guide to choose the right form for the sentence:

2. The beach was covered in soft _____(sandy).

3. _____(loamy) is a mixture of sand, silt, and clay.

4. _____(silty) can be carried away by water easily.

5. _____(erode) caused by heavy rain destroyed the road.

6. The air was filled with tiny _____(particle) of dust.

7. Adding organic matter to soil _____(help) it retain water.

8. Sandy soil drains _____(quick) after rainfall.

9. _____(fineness) of flour floated in the air as she baked.

10. _____(coarseness) of salt added texture to the dish.

11. _____(fertility) produces abundant crops.

12. _____(topsoiling) can lead to desertification.

13. This compost is _____(nutrient-rich) for plants.

14. Walking on wet soil can _____(compacted) it and harm plant roots.

15. _____(alluvium) is deposited by rivers and is very fertile.

5. CHOOSE THE RIGHT ANSWER:

Questions:

1. What is the main role of soil in the earth's surface?

a) Supporting plant growth and sustaining life

b) Providing shelter for animals
c) Regulating the temperature of the earth
d) None of the above

2. How many types of soil are mentioned in the text?
a) Two
b) Three
c) Four
d) Five

3. Which type of soil is dense and heavy, and retains water well?
a) Clay soil
b) Sand soil
c) Loam soil
d) Silt soil

4. Why is sand soil unsuitable for growing most plants?
a) It is too dense
b) It retains too much water
c) It is made up of large particles and drains quickly
d) It is too rich in nutrients

5. What is loam soil made up of?
a) Sand, silt, and clay
b) Only sand
c) Only silt
d) Only clay

6. What is silt soil susceptible to?
a) Erosion
b) Drought
c) Overwatering
d) None of the above

7. What is erosion?
a) The process of moving soil from one place to another by wind or water
b) The process of planting trees and other vegetation to protect the soil
c) The process of building terraces to prevent soil erosion
d) None of the above

8. How can soil erosion be prevented?
a) By building houses on top of the soil
b) By using cover crops
c) By overwatering the soil
d) None of the above

9. How are soil particles classified?
a) Sand, silt, and loam
b) Sand, silt, and clay
c) Clay, loam, and silt
d) None of the above

10. Why is it important to understand the different types of soil, erosion, and soil particles?

a) To ensure the sustainability of soil for future generations
b) To build houses on top of the soil
c) To regulate the temperature of the earth
d) None of the above

6. ANSWER:

1. What is soil, and why is it important?
2. What are the four main types of soil, and what are their unique characteristics?
3. Why is clay soil challenging to work with when it dries out?
4. Why is sand soil unsuitable for growing most plants?
5. What is loam soil, and why is it ideal for growing many types of plants?
6. Where is silt soil often found, and what are its properties?
7. What is erosion, and how does it impact soil fertility?
8. How can we prevent soil erosion?
9. What role do soil particles play in determining soil properties?
10. Why is understanding soil types, erosion, and soil particles crucial for agriculture and gardening?

7. WATCH THE VIDEO: https://www.youtube.com/watch?v=BArbrfmsxeQ AND CHOSSE THE BEST SUMMARY FOR IT:

1.Soil is not important and does not affect plant growth. Plants can grow without soil, and there are other ways for them to access nutrients. The video's explanation of how soil is formed is incorrect, and soil actually comes from outer space. The different types of soil do not have different properties, and they all function the same way. The classification of soils into soil orders is unnecessary and irrelevant.

2. The video talks about the importance of soil and how it is formed. Soil is made up of weathered and eroded rocks that settle on top of bedrock. Depending on the ratio of sand, silt, and clay, the soil will have different properties. There are five distinct horizons that can be observed in most places, and based on the development of these layers, soils can be classified into soil orders.

3. The video talks about the different types of soil and how they affect plant growth, but it does not mention the impact of soil on the environment. Soil erosion is a major problem that affects many areas of the world, and it can lead to desertification and loss of biodiversity. Soil pollution is also a growing concern, as human activities such as mining and agriculture can contaminate the soil with harmful chemicals. It is important to protect and conserve soil to ensure the health of our planet and its inhabitants.

8. DECIDE IF THESE STATEMENTS ARE TRUE OR FALSE:

1. Soil is not important for plants to access nutrients.
2. Soil came to Earth on an asteroid.
3. Weathering is the process of rocks becoming bigger.
4. Loam is not the best soil for most types of plants to grow in.
5. The A horizon is where most soil organisms reside.
6. The C horizon is where the bedrock is slowly degrading into soil.
7. The E horizon is where clay is deposited.

8. Intersols are the least common type of soil on Earth.
9. Spodosols are found in tropical rainforests.
10. Ultasols are very low in iron.

9. ANSWER THESE QUESTIONS ABOUT THE VIDEO:

1. What is soil and why is it important for plants?
2. How was soil formed on Earth?
3. What are the three sizes of weathered and eroded rock that make up soil?
4. What is the ideal ratio of sand, silt, and clay in soil for most plants to grow?
5. What are the five distinct horizons that can typically be observed in soil?
6. How do soil horizons help classify soils into different orders?
7. What are some examples of soil orders and where are they found?
8. How do soil orders differ from each other in terms of their characteristics?
9. Why are malasols considered the most fertile soil order for agriculture?
10. How does the climate and environment affect the development of soil horizons and soil orders?