

## **H2. Sand**

### **Sand in Soil**

Welcome to the world of soil, where the tiny grains of sand play an essential role! Sand is like the secret ingredient that makes soil special and helps plants grow big and strong. Let's explore the magic of sand in soil!

#### **The Sandy Superstar**

Sand is made up of tiny rock particles. It feels rough to touch, but it's a superstar in the world of soil!

#### **Sandy Homes**

You can find sand in many places, like beaches, deserts, and some gardens. It loves to make its home in warm and dry places.

#### **The Perfect Drainage Master**

One of the amazing things about sand is that it's like a great drainage master! When it rains, water can easily pass through the spaces between the sand particles, allowing the soil to stay nice and dry.

#### **A Breath of Fresh Air**

Sand helps the soil breathe! It creates tiny spaces that allow air to reach the roots of plants, just like we need air to breathe.

#### **A Balancer of Nutrients**

Sand helps balance the nutrients in the soil, making sure plants get just the right amount of food they need to grow healthy and strong.

#### **Sandy Playtime**

You can have some fun with sand too! Try building a sandcastle at the beach or make a mini beach in your backyard.

#### **Mix It Up!**

When you mix sand with other types of soil, like clay or silt, you get a special kind of soil called loam. Loam is like a superhero soil because it has the perfect mix of sand, silt, and clay!

#### **The Right Balance**

Finding the right balance of sand in soil is important. Too much sand can make the soil too dry, and too little sand can make it too wet. But when the balance is just right, plants can grow happily!

#### **Sandy Adventurers**

Some plants, like cacti, love sandy soil because it lets water pass through quickly, just like they prefer it!

## Secrets of the Seaside

If you've ever been to the beach, you've seen how plants grow in the sand near the shore. They are the sandy adventurers, thriving in the challenging beach environment.

1. What is sand made up of?
  - A) Tiny rock particles
  - B) Soft cotton
  - C) Water and air bubbles
  - D) Hard pebbles
2. Where can you find sand?
  - A) In the sky
  - B) On mountaintops
  - C) At the beach and in deserts
  - D) In underground caves
3. What is one amazing thing about sand's ability to drain water?
  - A) It traps water and holds it in the soil
  - B) Water easily passes through the spaces between sand particles
  - C) It makes the soil too wet
  - D) It turns into mud when wet
4. What does sand help the soil do?
  - A) Stay dark and cool
  - B) Breathe and get fresh air
  - C) Turn into clay
  - D) Trap air bubbles
5. What is one special quality of loam soil?
  - A) It's made of only sand
  - B) It's made of only clay
  - C) It's a superhero soil with the perfect mix of sand, silt, and clay
  - D) It's hard and difficult for plants to grow in
6. What happens when you mix sand with clay or silt?
  - A) You get a special kind of soil called loam
  - B) The soil becomes too dry
  - C) The soil becomes too wet
  - D) The soil becomes too hard
7. Why do some plants love sandy soil?
  - A) Because it's hard and sturdy
  - B) Because it holds water for a long time
  - C) Because it lets water pass through quickly
  - D) Because it's soft and fluffy

8. What happens when the balance of sand in soil is just right?

- A) Plants can grow happily
- B) The soil becomes too dry
- C) The soil becomes too wet
- D) Plants cannot grow at all

9. Where do sandy adventurers like cacti thrive?

- A) In the forest
- B) In the desert
- C) In the mountains
- D) Near the river

10. What is one place you can find plants growing in the sand near the shore?

- A) In the forest
- B) In the desert
- C) At the beach
- D) Near the river

## ANSWERS & EXPLANATIONS

1. A) Tiny rock particles.
  - Sand is made up of tiny rock particles.
2. C) At the beach and in deserts.
  - You can find sand at the beach and in deserts.
3. B) Water easily passes through the spaces between sand particles.
  - One amazing thing about sand is its ability to drain water because water can easily pass through the spaces between sand particles.
4. B) Breathe and get fresh air.
  - Sand helps the soil breathe and allows air to reach the roots of plants.
5. C) It's a superhero soil with the perfect mix of sand, silt, and clay.
  - Loam soil is special because it has the perfect mix of sand, silt, and clay, making it a superhero soil for plants.
6. A) You get a special kind of soil called loam.
  - When you mix sand with clay or silt, you get a special kind of soil called loam.
7. C) Because it lets water pass through quickly.
  - Some plants love sandy soil because it lets water pass through quickly, just like they prefer it!
8. A) Plants can grow happily.
  - When the balance of sand in soil is just right, plants can grow happily.
9. B) In the desert.
  - Sandy adventurers like cacti thrive in the desert.
- 10.C) At the beach.
  - Plants can be found growing in the sand near the shore at the beach.