

PLANTS & ROOTS WORKSHEET (CLASS 4)

Question 1: Roots have thousands of tiny, hair-like structures called root hairs growing on them. What is the main job of these root hairs?

- a) To protect the plant from insects underground.*
- b) To increase the surface area so the plant can absorb more water and minerals.*
- c) To anchor the plant firmly so it cannot be pulled out easily.*
- d) To store extra food made by the green leaves.*

Question 2: Imagine a plant is growing in completely dry soil, but there is water a few inches away. In which direction will the roots naturally grow, and what is this plant behavior called?

Answer:

Question 3: True or False: Water moves upward from the roots to the leaves through special tube-like pathways inside the plant stem.

Answer: _____

Question 4: The Banyan tree grows special roots that hang down from its heavy branches into the soil. What are these roots called, and what is their main purpose?

Type of root: _____

Main purpose:

Question 5: Look at the examples below and classify them into the correct root category.

Examples: Carrot, Radish, Beetroot

Are these examples of Fibrous Roots or Taproots?

Answer: _____

Question 6: Mangrove trees grow in marshy, waterlogged soil where there is no air trapped in the mud. How do their roots adapt to help the tree breathe?

Answer:

Question 7: When heavy rain falls on a bare hillside with no plants, the topsoil easily washes away. How do plant roots prevent this soil erosion from happening?

Answer:

Question 8: Read the scenario and select the correct environmental impact.

"A community decides to chop down all the deep-rooted trees along a riverbank to build a concrete pathway." What is a likely result?

- a) The river water will become cleaner.*
- b) The riverbank will easily collapse and erode during floods.*
- c) More groundwater will collect under the soil.*
- d) New plants will grow faster on the riverbank.*

Question 9: Deforestation directly destroys the underground network of roots.

Aside from losing trees, how does this affect the water cycle in that area?

Answer:

Question 10: Complete the conservation slogan using the correct words:

"Plant more trees to anchor the _____, keep our air clean, and save the _____!"