

Research has shown that certain minerals are required by plants for normal growth and

question 1

According to paragraph 1, what is true of plants that can grow in serpentine soil?

- A They absorb micronutrients unusually well.
- B They require far less calcium than most plants do.
- C They are able to absorb nitrogen in its elemental state.
- D They are typically crops raised for food.

question 2

According to paragraph 2, which of the following symptoms occurs in phosphorus-def

- A Chlorosis on leaves
- B Change in leaf pigmentation to a dark shade of green
- C Short, stunted appearance of stems
- D Reddish pigmentation on the leaves or stem

question 3

According to paragraph 2, a symptom of iron deficiency is the presence in young leave

- A deep red discoloration between the veins
- B white or yellow tissue between the veins
- C dead spots between the veins
- D characteristic dark green veins

question 4

According to paragraph 3, what is the advantage of hydroponics for research on nutrients?

- A It allows researchers to control what nutrients a plant receives.
- B It allows researchers to observe the growth of a large number of plants simultaneously.
- C It is possible to directly observe the roots of plants.
- D It is unnecessary to keep misting plants with nutrient solutions.

question 5

Why does the author mention "herbs", "shrubs", and "trees"?

- A To provide examples of plant types that cannot tolerate high levels of harmful minerals.
- B To show why so many plants are hyperaccumulators.
- C To help explain why hyperaccumulators can be found in so many different places.
- D To emphasize that hyperaccumulators occur in a wide range of plant types.

question 6

Which of the sentences below best expresses the essential information in the highlighted text?

- A Before considering phytoremediation, hyperaccumulating species of plants local to the target area are identified.
- B The investigation begins with an evaluation of toxic sites in the target area to determine the extent of contamination.
- C The first step in phytoremediation is the planting of hyperaccumulating plants in the target area.
- D Mines and irrigation ponds can be kept from becoming contaminated by planting hyperaccumulating plants.

question 7

It can be inferred from paragraph 6 that compared with standard practices for remediation, phytoremediation

- A does not allow for the use of the removed minerals for industrial purposes.

B can be faster to implement

C is equally friendly to the environment

D is less suitable for soils that need to be used within a short period of time

question 8

Why does the author mention "Indian mustard" ?

A To warn about possible risks involved in phytoremediation

B To help illustrate the potential of phytoremediation

C To show that hyperaccumulating plants grow in many regions of the world

D To explain how zinc contamination can be reduced

question 9

Look at the four squares [] that indicate where the following sentence could be added

Research has shown that certain minerals are required by plants for normal growth and

question 10

Directions: An introductory sentence for a brief summary of the passage is provided below

A. Some plants are able to accumulate extremely high levels of certain minerals and the

B. Though beneficial in lower levels, high levels of salts, other minerals, and heavy meta

C. When plants do not absorb sufficient amounts of essential minerals, characteristic al

D. Because high concentrations of sodium chloride and other salts limit growth in mos

E. Some plants can tolerate comparatively low levels of certain minerals, but such plant

F. Mineral deficiencies in many plants can be cured by misting their roots with a nutrien

