

### Photosynthesis and the use of mineral nutrients by plants

1. What does the word 'synthesis' mean?
2. What is synthesised during photosynthesis?
3. What gas is needed for photosynthesis to take place?
4. What liquid is needed for photosynthesis to take place?
5. What type of energy is needed for photosynthesis to take place?
6. What type of sugar is made?
7. What gas is made during photosynthesis?
8. What does chlorophyll do?
9. Why does a leaf need a large surface area?
10. What is the name of the cells ( towards the top of the leaf) in which most photosynthesis takes place?

11. Where does carbon dioxide gas enter the leaf?
12. Why is important that a leaf is thin?
13. What is a group of similar cells called?
14. Why does the upper epidermis produce a waxy cuticle?
15. What makes the spongy mesophyll layer of cells 'spongy'?
16. Carbon dioxide enters the leaf. What 2 gases leave the leaf?
17. What parts are found in large numbers inside the palisade mesophyll cells?
18. What green chemical is found inside these parts?
19. Where do plants get their mineral nutrients from?
20. Why are dead plants and animals useful to the plants?

21. What part of a plant absorbs mineral nutrients?

22. Why do some root cells have root hairs?

23. What are nitrates used for by plants?

24. What is magnesium used for by plants?

25. What colour are the leaves of plants that are growing in a place with very little magnesium present?