National 5 Biology revision questions: Life on Earth.

1. Draw a food chain with five organisms and identify the producer, consumers, herbivores, carnivores and omnivores.

2. What is meant by the terms predator and prey?

3. What does an ecosystem consist of?

4. Describe the niche of an organism.

5. Give to types of competition stating the difference between them.

6. Which type of competition is most intense and why?

7. Name five biotic factors.

8. Name four abiotic factors.

9. How would you measure light intensity, soil temperature and the abundance of daisies in an area?

10. Fully describe how you would set up a pitfall trap.

11. What are indicator species?

12. Draw a flow diagram showing the light reactions of photosynthesis THEN describe what each part means.

13. What happens in carbon fixation?

14. What controls the speed of carbon fixation?

15. What is produced at the end of carbon fixation and what two substances can this be converted into?

16. Name three limiting factors of photosynthesis.

17. How is energy lost from a food chain?

18. Compare a pyramid of numbers and a pyramid of energy.

19. How can humans increase the food that is required for a growing population?

20. Why is nitrogen needed by plants?

21. What is this nitrogen absorbed as?

22. Fully describe what happens if fertilisers leach into freshwater.

23. What can be used to reduce the use of fertilisers?

24. What is the issue for food chains if crops are sprayed crops with pesticides?

25. What is a mutation and when do they occur?

26. If new alleles are produced by mutation, what can this result in?

27. Describe natural selection and how this can influence the development of a new species.

28. Name three types of isolation barriers.

29. What are selection pressures?