

IGCSE Year 1 Science

Topic 1: Life Processes and Ecosystems

Student Practice Worksheet

Set 1: Multiple Choice

Choose the single best answer for each question by circling the correct letter.

1. What form of exercise is best for building your stamina?
 - A. Sleeping
 - B. Running or swimming
 - C. Stretching
 - D. Sitting
2. What do we call drugs that are specifically used to treat illnesses?
 - A. Vaccines
 - B. Poisons
 - C. Medicines
 - D. Prescriptions
3. How are medicines for asthma usually taken into the body?
 - A. Swallowed as a pill
 - B. Rubbed on the skin
 - C. Injected
 - D. Inhaled through an inhaler
4. What do we call the practice of keeping infected animals apart from healthy ones to stop disease from spreading?
 - A. Rehabilitation
 - B. Vaccination
 - C. Quarantine
 - D. Digestion
5. Who used scientific enquiry to develop the very first vaccine for smallpox over 200 years ago?
 - A. Albert Einstein
 - B. Edward Jenner
 - C. Galileo
 - D. Isaac Newton
6. What is the scientific name for an animal's natural home or surroundings?
 - A. Ecosystem
 - B. Pharmacy
 - C. Habitat
 - D. Enclosure

7. Which of the following is a producer in a food chain?
- A. A grasshopper
 - B. A hawk
 - C. A plant
 - D. A rabbit
8. An animal that only eats meat is called a:
- A. Herbivore
 - B. Carnivore
 - C. Omnivore
 - D. Producer
9. What is the main source of energy for all living things on Earth?
- A. The Sun
 - B. Soil
 - C. Water
 - D. Wind
10. During photosynthesis, what sugar do plants make for energy?
- A. Sucrose
 - B. Fructose
 - C. Glucose
 - D. Lactose

Set 2: True or False

State whether each statement is True or False, and write your answer on the line provided.

11. Eating a balanced diet without any exercise is enough to make you strong and flexible. _____
12. Medicines can be swallowed, injected, inhaled, or absorbed through the skin. _____
13. Only humans get infectious diseases; plants and animals do not. _____
14. Rabies is an infectious animal disease that can be passed on to humans. _____
15. Smallpox is a deadly disease that no longer exists today because of successful vaccination programmes. _____
16. A rock-pool is a suitable habitat for a rabbit. _____
17. Animals that are taken to rehabilitation centres are always able to return to the wild. _____
18. All food chains must start with a plant. _____
19. An omnivore is an animal that eats only plants. _____
20. Animals get their energy indirectly from the Sun by eating plants or other animals. _____

Set 3: Fill in the Blanks

Fill in the missing scientific word to complete each sentence.

21. To become more _____, you need to do exercises like stretching to make your body bendy and supple.
22. Doctors sometimes give sick patients a _____ to take to a pharmacy so they can get the right medicine.
23. A _____ is a small amount of a disease injected into the body to teach it how to fight the illness.
24. The branch of medicine that deals with the prevention and treatment of diseases in animals is called _____ medicine.
25. The place in the environment where a plant or animal lives is called its _____.
26. Limpets have a strong muscular _____ that attaches them to rocks so they aren't washed away by the tide.
27. When we describe what eats what in an environment, we are describing _____ relationships.
28. An animal that consumes another animal is a _____, and the animal it eats is its prey.
29. Plants make their own food through a process called _____.
30. During photosynthesis, plants use light energy to change water and _____ into glucose.

Set 4: Matching Concepts

Match the term on the left with its correct scientific description on the right. Write the correct letter (A-E) on the line next to each term.

Descriptions Bank:

- A. An animal that relies on plants or other animals for its food.
- B. Restoring an animal to health after an injury or illness.
- C. The scientific name for our surroundings and the conditions found there.
- D. Medicines used to treat infections caused by bacteria.
- E. Being able to carry on doing something for a long time.

- 31. Stamina _____
- 32. Antibiotics _____
- 33. Rehabilitation _____
- 34. Consumer _____
- 35. Environment _____

Set 5: Short Answer Questions

Write a brief scientific explanation for each question on the lines provided.

36. Why is it important to do exercises like push-ups and sit-ups?

37. Why should you never take medicine that was prescribed for someone else, or eat pills that look like sweets?

38. What did Edward Jenner observe about dairy maids that helped him create the smallpox vaccine?

39. What three things must a habitat provide for an animal to survive?

40. How is a limpet's shell adapted to keep it safe from predators?

41. What is the purpose of an identification "key" in science?

42. What is the difference between a herbivore and a carnivore?

43. What does a food chain show?

44. Why are plants called “producers”?

45. Look at this food chain: Grass → Rabbit → Hawk. What would happen to the hawk if all the rabbits died?

Set 6: Scientific Enquiry / Practical Questions

These questions test your ability to model and investigate scientific concepts.

- 46.** A student runs on the spot for 60 seconds to test their fitness. What observation should they make to see how hard their body is working?

- 47.** When Edward Jenner tested his new smallpox vaccine, he repeated his test many times on other patients. Why is repeating tests an important part of scientific enquiry?

- 48.** You want to investigate how plants need light to grow. You place Plant A in a sunny window. Where should you place Plant B to make a fair comparison?

- 49.** In the plant light experiment above, name two variables you must keep the same to ensure it is a fair test.

- 50.** You are investigating pine leaves (needles) to see how they are adapted to snowy mountain habitats. You cut different leaf shapes out of paper and drop fake snow (flour) on them. What are you trying to observe?
