## The Human Breathing System

- 1. Distinguish between breathing and respiration.
- 2. Where do cilia occur in the breathing system? What is their function?
- 3. State one possible cause of asthma or bronchitis.
- 4. Give an example of a treatment for asthma or bronchitis.
- 5. State precisely the events that take place at the alveoli. How are the alveoli adapted for these events?
- 6. Breathing rate in humans is controlled by the concentration of a gas dissolved in blood. Which gas is this?
- 7. Suggest one way in which a person might adapt his/her lifestyle to minimise the effects of asthma or bronchitis.
- 8. The bronchioles end in small sacs. What is the name of these sacs?
- 9. Name the muscles that are used in breathing.
- 10. Breathing causes pressure changes in the thoracic cavity. Describe briefly how these pressure changes are brought about.
- 11. The trachea contains rings of cartilage. Suggest a function of this cartilage.
- 12. Name a breathing disorder. Give a possible cause of this disorder and suggest a means of prevention **or** treatment.
- 13. Name the blood vessels that bring this blood back from the lungs.
- 14. Name a breathing disorder. Name: \_\_\_\_\_\_ and state:
  - 1. A cause
  - 2. A means of prevention
  - 3. A treatment
- 15. Describe briefly the role of the diaphragm and intercostal muscles in inhalation.

In your answer refer to volume and thoracic air pressure.

- 16. Name the process involved in the passage of gas between the alveolus and the blood.
- 17. Give **three** ways in which an alveolus is adapted for efficient gas exchange.
- 18. True or false. Humans receive oxygen from the air they inhale.
- 19. Apart from water, name **one** other substance which is found in sweat.
- 20. State the location in the human body of the following muscles which are used for breathing: diaphragm, intercostals.
- 21. How did you measure the breathing rate or the pulse?

- 22. What is the role of alveoli in the lungs?
- 23. Name a breathing disorder. Suggest a possible cause of it and state how it may be treated.
- 24. Name a disorder of the breathing system and say how it may be: 1. Caused, 2. Prevented, 3. Treated.
- 25. Which gas, dissolved in the blood, can trigger deeper or faster breathing?
- 26. In what structures in the lungs does gaseous exchange take place?
- 27. Give one feature of the alveoli that allows efficient exchange of gases.
- 28. What is the function of the larynx?
- 29. Outline the steps involved in inhalation.