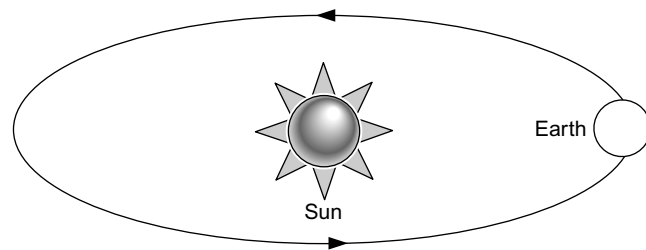


Self test - Foundation

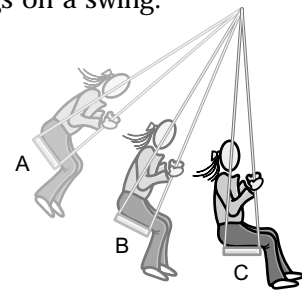


- b** Which option gives the correct description of the position of Venus in the Solar System? [1]
- A** Between the Sun and the Earth
B Between the Earth and Jupiter
C Beyond Jupiter
- c** Name one planet that is closer to the Sun than Venus is. [1]
- d** What is the brightest object that can be seen in the night sky? [1]
- 8** The diagram shows the Earth's orbit around the Sun.



- a** On a copy of the diagram, shade the part of the Earth that is in darkness. [1]
- b** Explain what causes night to turn into day on this part of the Earth. [1]
- c** Draw the position of the Earth six months later than the position shown in the diagram. [1]
- d** How long does it take for the Earth to return to the position in the diagram? [1]
- 9** A greenhouse has glass walls that face north, south, east and west.
- a** Through which wall is the Sun visible at midday in December? [1]
- b** Through which wall does the Sun shine when it rises in the morning? [1]
- c** Explain why the Sun shines through the roof of the greenhouse in summer but only through the walls in winter. [1]

- 10** Oil is a fossil fuel.
- a** Give the names of two other fossil fuels. [2]
- b** Where did the energy that is stored in fossil fuels come from? [1]
- c** Explain why fossil fuels are described as being non renewable. [1]
- d** Give the name of one renewable source of energy. [1]
- 11** The diagram shows three positions of a child as she swings on a swing.



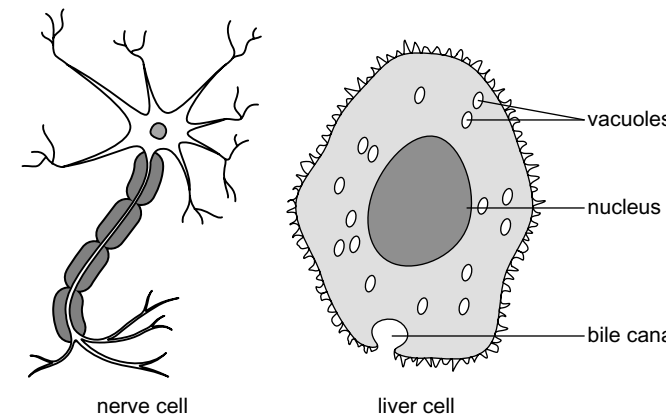
- a** At which position does she have the most kinetic energy? [1]
- b** At which position does she have the most potential energy? [1]
- c** At which position could her kinetic energy be zero? [1]
- d** The swing slows down and eventually stops. What has happened to the energy that she had while swinging? [1]
- 12** Energy from electricity can be transferred as heat, movement and light.
 Copy and complete the sentences about the energy from a lamp.
- a** A lamp transfers energy as (a) _____ and _____ . [1]
- b** The energy transferred as (b) _____ is wasted. [1]
- c** The energy transferred as (c) _____ is useful. [1]



Self test - Higher

Biology

- 1 a** You have landed on an alien planet. In front of you are three objects. When studying the objects on the planet for life what are the seven signs you will look for. [2]
- b** If you found a fossil in a rock how would you convince someone that this had once been alive? [1]
- c** Some people argue that viruses are not alive. What two key features do viruses have that would contradict this? [1]
- 2** The two cells shown are a liver cell and a nerve cell.



- a** What extra features would you expect a plant cell to have? [1]
- b** Write down the main function of: the nucleus, the cytoplasm, and the cell membrane? [2]
- c** State two ways in which the nerve cell is adapted to carry messages. [1]
- d** Choose a body system for humans from the following list: digestive; skeletal; excretory; reproductive. Name any two organs in the

- system you have chosen and say what their functions are. [2]
- 3 a** Give two reasons for classifying living things. [1]
- b** Archaeopteryx is a fossil animal. It has feathers and wings, but probably could not fly.
- (i)** What group does it belong to? [1]
- (ii)** What sort of eggs would you have expected it to lay? [1]
- (iii)** It is a vertebrate animal. What does this mean? [1]
- (iv)** Vertebrates are part of a larger phylum of animals which have a central supporting rod. What is the name of this group? [1]
- c** Write down two features of insects. [1]
- 4 a** What are the two sorts of reproduction? [1]
- b** Choose the best definition. Fertilization is [1]
- when pollen is carried to the stigma
 when an egg is released from the ovary
 the zygote undergoing its first division
 the egg joining with a sperm
- c** Why do anthers ripen at a different time from the stigmas? [1]
- 5** In the human reproductive system:
- a** Where are sperm made? [1]
- b** Write down two functions of semen [1]
- c** Why are the testicles outside the main body cavity? [1]
- d** How often does an egg get released? [1]
- e** Approximately how long after menstruation is an egg normally released? [1]
- f** What is the lining of the womb designed for? [1]