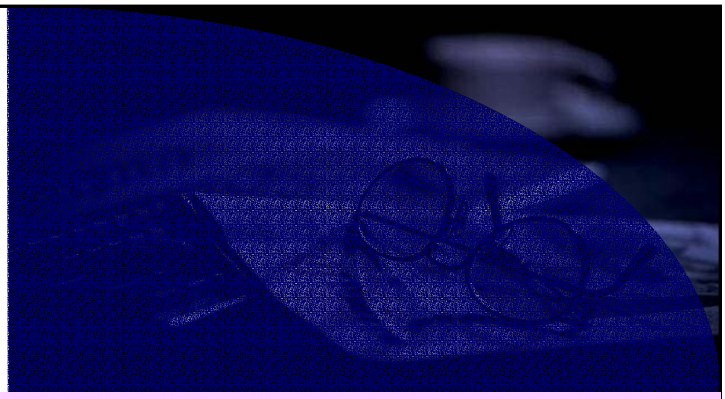
assessment for learning

year 7



Science Interactive LTD. PO BOX 50764 LONDON NW6 9AT web: www: science-interactive.co.uk

7l Energy resources

Assessment for learning...year 7 (level 3-6)

Answer all questions:

Total marks	**28**
Time allowed	**25 mins.**

Question 1:

This question is about **three** different fuels, A, B and C.

Fuel A is stored in tanks. It is not stored under pressure. It flows along a pipe to where it is needed.

Fuel B is stored under pressure in small cylinders. It is used by campers.

Fuel C can be stored in sacks or bags.

(a) (i) Tick the correct box.

Fuel A is a:

solid ☐

liquid ☐

gas ☐

1 mark

Name a fuel which A could be .....

1 mark

(ii) Tick the correct box.

When fuel B comes out of the cylinder this is a:

solid ☐

liquid ☐

gas ☐

1 mark

Name a fuel which B could be .....

1 mark

(iii) Tick the correct box.

Fuel C is a:

solid ☐

liquid ☐

gas ☐

1 mark

Name a fuel which C could be .....

1 mark

(b) Complete the statement to describe what happens when a fuel burns.

Two waste products formed from burning fuels are

..... and .....

2 marks

Maximum 8 marks

-

Question 2:

Coal is a non-renewable energy resource.

(a) Give **two other** non-renewable energy resources.

1. .....

2. .....

2 marks

Wood is a renewable energy resource.

(b) Why can wood be described as a renewable energy resource?

.....

.....

1 mark

(c) Give **two other** renewable energy resources.

1. .....

2. .....

2 marks

(d) Complete the statement below to describe what happens when wood burns.

When wood burns, chemical energy in the wood is transformed

into ..... energy, which is transferred to the surroundings.

1 mark

Maximum 6 marks

Question 3:

Oil is an important energy resource. It provides about 38% of the energy used for transport, heating and generating electricity.

(a) The energy stored in oil came from the Sun.

(b) Describe how energy from the Sun became stored in oil.

.....

.....

.....

.....

2 marks

(b) (i) Oil can be described as a non-renewable energy resource. Explain why.

.....

.....

1 mark

(ii) Tick the boxes by **two** other non-renewable energy resources.

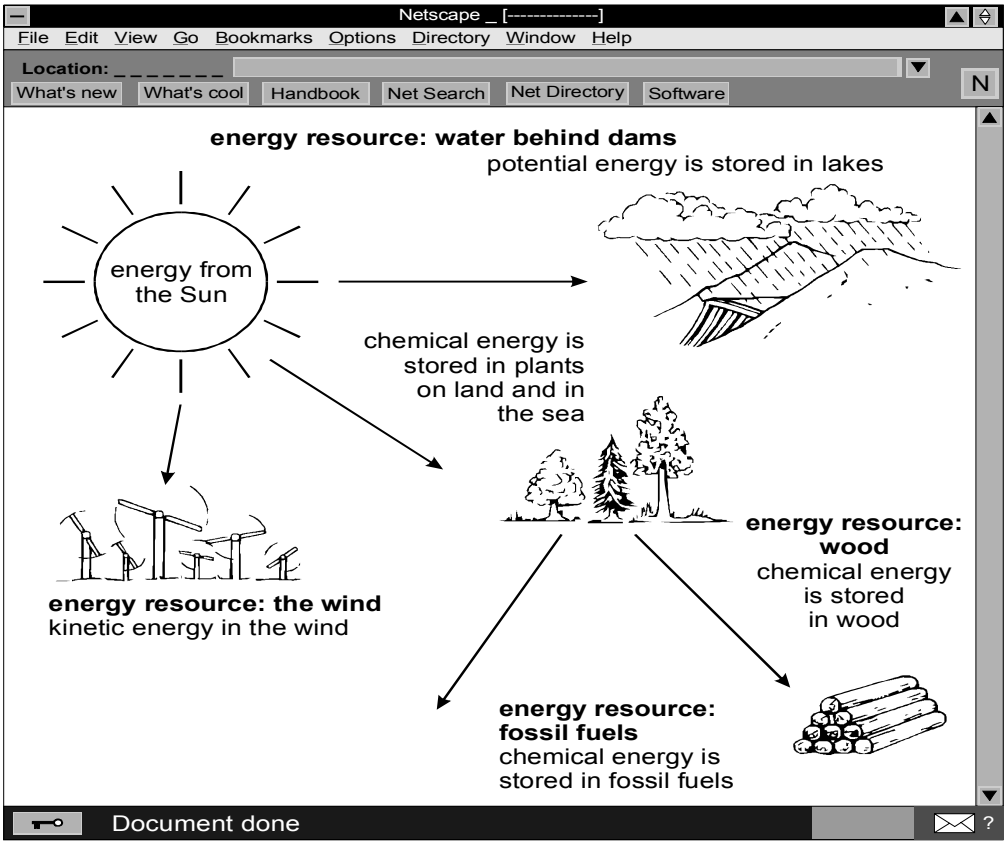
Coal	☐	wind	☐
solar	☐	tidal	☐
natural gas	☐	wave	☐

2 marks

Maximum 5 marks

Question 5:

Some pupils are designing a web page about energy resources. Their design is shown below. It is not quite finished.



(a) To complete the web page, the pupils want to add a drawing of some fossil fuels.
Give the names of **two** fossil fuels.

1. .....…

2. .....…

2 marks

(b)Four energy resources are labeled on the web page:

water behind dams **the wind** **fossil fuels** **wood**

How many of these can be used to generate electricity?

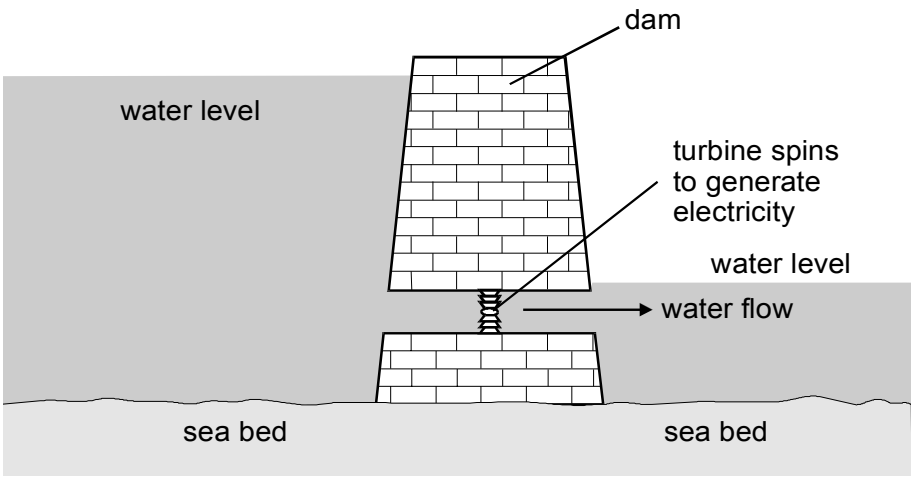
.....

1 mark

Maximum 3 marks

Question 5:

The tides can be used to generate electricity. A dam is built across a river estuary, as shown below.



(a) The water is higher on one side of the dam than on the other. As the water begins to flow through the dam it turns a turbine. The turbine generates electricity.

(b) Describe the useful energy changes which take place in this process.

.....

.....

.....

.....

2 marks

(b) Explain why tides are classified as a renewable energy source.

.....

.....

1 mark

(c) Give **one** way, **other** than from the tides, of generating electricity by using the sea.

.....

1 mark

(d) Apart from cost, give **one** advantage and **one** disadvantage of an oil-fired power station compared with a tidal power station.

advantage .....

.....

disadvantage .....

.....

2 marks

Maximum 6 marks

-