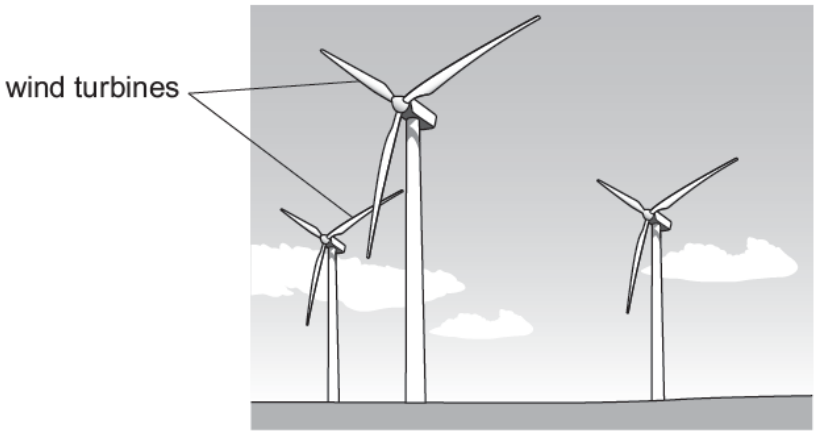
Energy Resources – Checkpoint Sec 1 Physics

1. No.10

Wind is an energy resource.



(a) Wind turbines supply energy.

Suggest **two disadvantages** of using wind turbines.

1 .....

.....

2 .....

.....

[2]

(b) People in many countries are trying to **increase** the number of wind turbines.

Suggest why.

.....

.....

..... [2]

2. No.1

Wood is an example of a renewable energy source.

(a) State **two more** examples of **renewable** energy sources.

..... and ..... [1]

(b) Many countries are stopping using **non-renewable** energy sources.

Write down **two** reasons why.

1 .....

.....

2 .....

.....

[2]

3. No.14

Look at the list of energy sources.

Tick (✓) the **two** renewable energy sources.

coal	☐
hydroelectric	☐
oil	☐
natural gas	☐
solar	☐

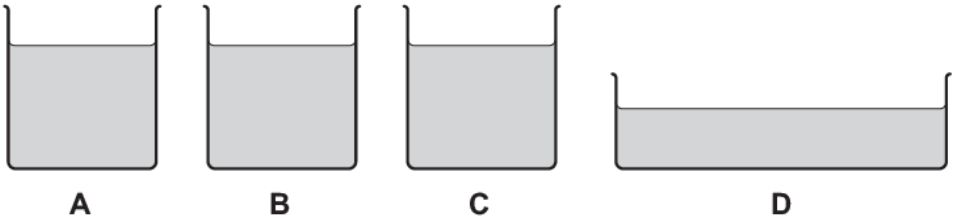
[2]

4. No.9

Mike has four copper containers.

He puts water into each container.

He puts all the containers in a classroom at 20 °C for 10 minutes.



Mike draws this table about the containers.

container	outside surface of container	volume of water in cm^3	temperature of water at start in °C
A	dull	100	60
B	shiny	100	60
C	dull	100	70
D	dull	100	60

(a) Mike compares container **A** with container **B**.

The water cools faster in **A** than in **B**.

(i) Complete the sentence.

The difference between the two containers is .....

..... . [1]

(ii) Complete the sentence.

Choose from the list.

boiler **conductor** **freezer** **radiator**

The water cools faster in container **A** because the container is a better

..... . [1]

(b) Mike compares container **C** with container **A**.

The water cools faster in **C** than in **A**.

Why does the water cool faster in **C** than in **A**?

.....

..... [1]

(c) Mike compares container **D** with container **A**.

The water cools faster in **D** than in **A**.

Suggest why.

.....

..... [1]

5. No.4

Look at the list of different energy sources.

wood

sugar

coal

crude oil (petroleum)

propane (LPG)

sunflower oil

Which three of these energy sources are **non-renewable**?

1 .....

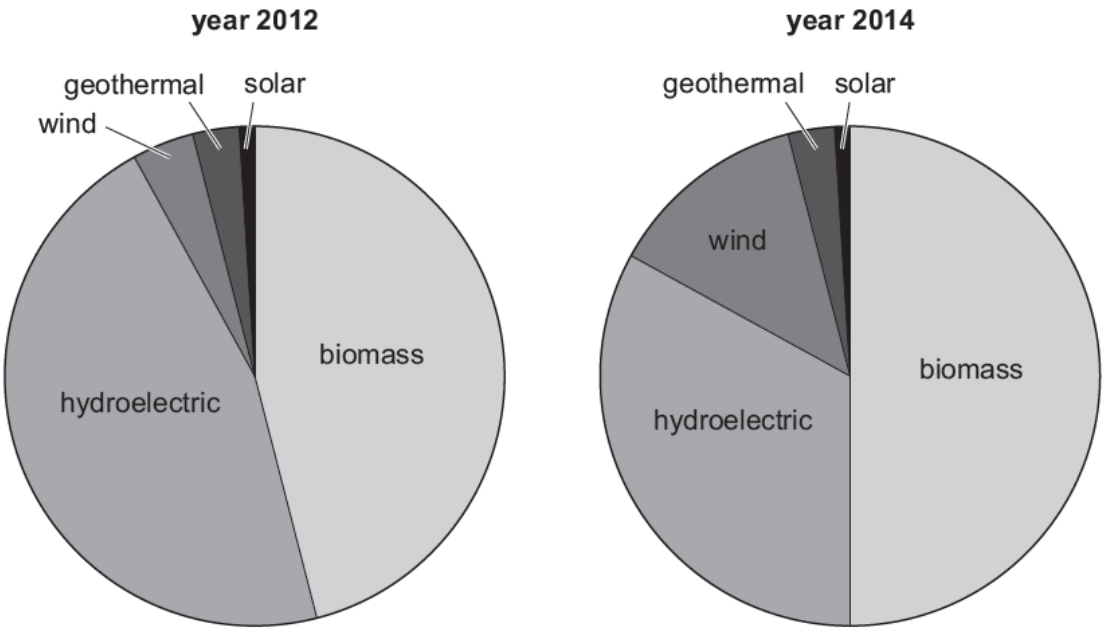
2 .....

3 .....

[1]

6. No.13

Safia finds information about renewable energy resources used in a country for the years 2012 and 2014.



(a) Estimate the percentage of renewable energy provided by biomass in 2012.

..... % [1]

(b) The percentage of the renewable energy resources used changed from 2012 to 2014.

Which percentage increased the most?

Circle the correct answer.

biomass

geothermal

hydroelectric

solar

wind

[1]

(c) The energy needs of the world are increasing.

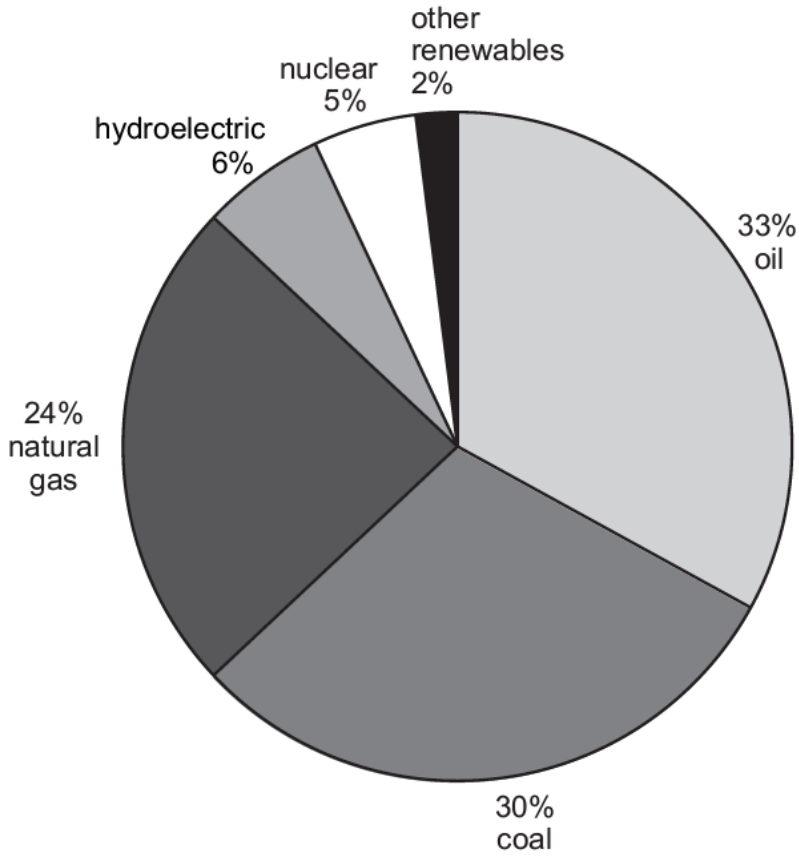
Why is it important to develop **renewable** energy resources?

.....

..... [1]

7. No.11

Carlos uses the internet to collect information about the use of world energy resources in 2016.



(a) Hydroelectric is a renewable resource.

Write down the names of **two other** types of renewable resources.

..... and ..... [1]

(b) The pie chart will be different in the year 2050 compared to 2016.

Suggest **three** differences.

.....

.....

.....

..... [3]

8. No.6

The world human population needs increasing amounts of energy.

A large amount of energy is obtained by burning fuels.

(a) Look at the list.

Circle the fuel that is a renewable source of energy.

biomass **coal** **gasoline (petrol)** **natural gas**

[1]

(b) Burning these fuels releases carbon dioxide into the environment.

(i) Describe some harmful effects of increasing levels of carbon dioxide on the environment.

.....

.....

.....

.....

..... [3]

(ii) Suggest which of these fuels would be the best to burn, if we must continue to burn fuel.

coal **gasoline (petrol)** **hydrogen** **wood**

Explain your answer.

fuel .....

explanation .....

..... [1]