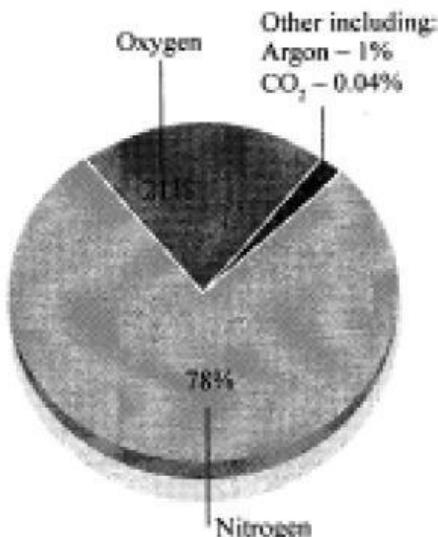


5. The chart shows the main composition of the Earth's air.



(a) State the gas needed for the processes of photosynthesis and combustion.

[1]

(b) Name the gas which

(i) makes drinks fizzy _____

(ii) is converted into nitrates _____

[2]

(c) (i) Name the gas which combines with food nutrients to produce energy.

[1]

(ii) Name the gas that is a compound and give a reason for your answer.

gas _____ reason _____

[1]

(d) The **condition** of the air surrounding the Earth may be hot or cold, wet or dry, calm or stormy, clear or cloudy.

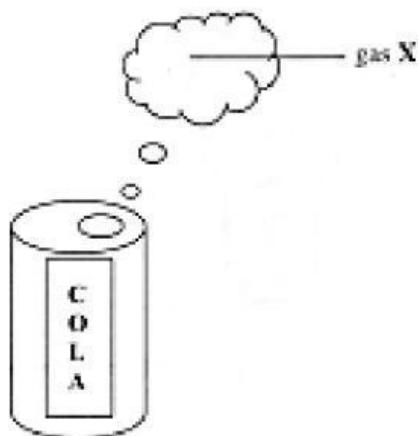
(i) Name the layer of air surrounding the earth.

[1]

(ii) What is the name given to the **condition** of the air surrounding the Earth?

[1]

6. The diagram shows a can of soft drink that was just been opened.



Gas X is colourless, odourless and tasteless.

(a) (i) Name gas X.

_____ [1]

(ii) Name the property of gas X which makes it ideal for use in soft drinks like sodas.

_____ [1]

(iii) Write the chemical formula for gas X and draw its molecular structure in the boxes.

chemical formula _____ [2]

molecular structure _____ [2]

Substances can be classified as acidic, basic or neutral.

(c) (i) State the colour of damp, blue litmus paper placed in gas X.

Changes from blue to _____ [1]

(ii) Suggest how gas X can be classified using this result.

_____ [1]

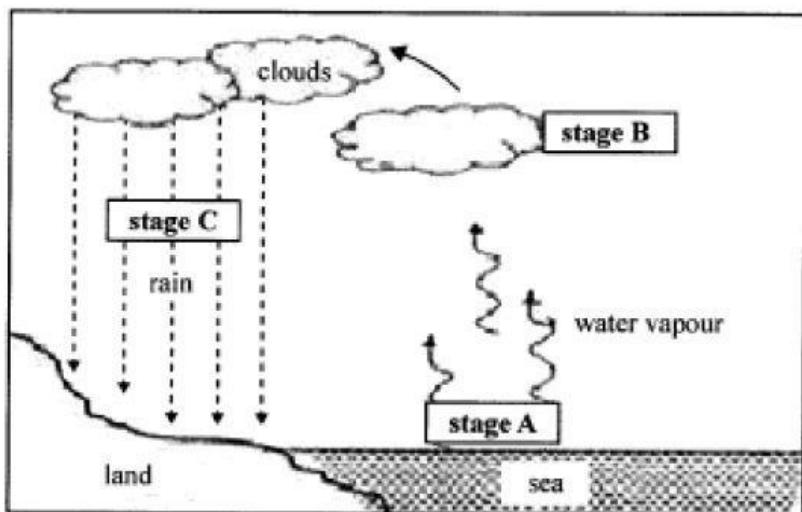
(d) State a test for gas X and give its positive results.

test _____

results _____ [2]

Total marks [10]

(b) The diagram shows the stages in the water cycle.



(i) Name the processes taking place at stages A and B.

process A _____

process B _____

[2]

(ii) Water released from the clouds in the form of rain, hail, snow or sleet is an important stage in the water cycle.

Name this process which takes place at stage C in the water cycle.

_____ [1]

(c) (i) Name the form of energy needed for the process at stage A.

_____ [1]

(ii) State the main source of this form of energy.

_____ [1]

Total marks [10]