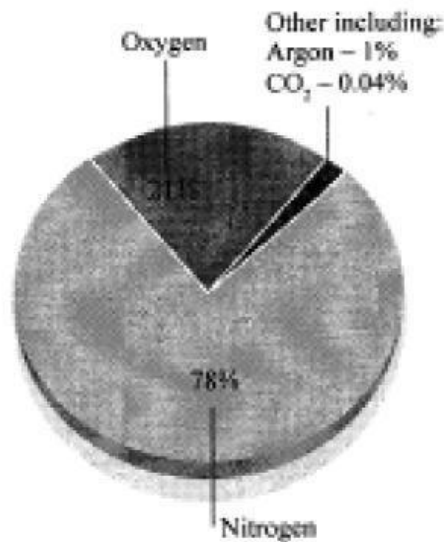
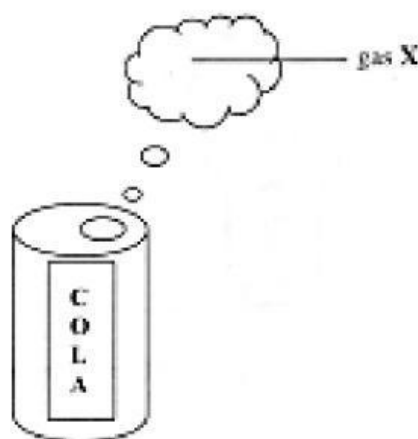


5. The chart shows the main composition of the Earth's air.



- (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.

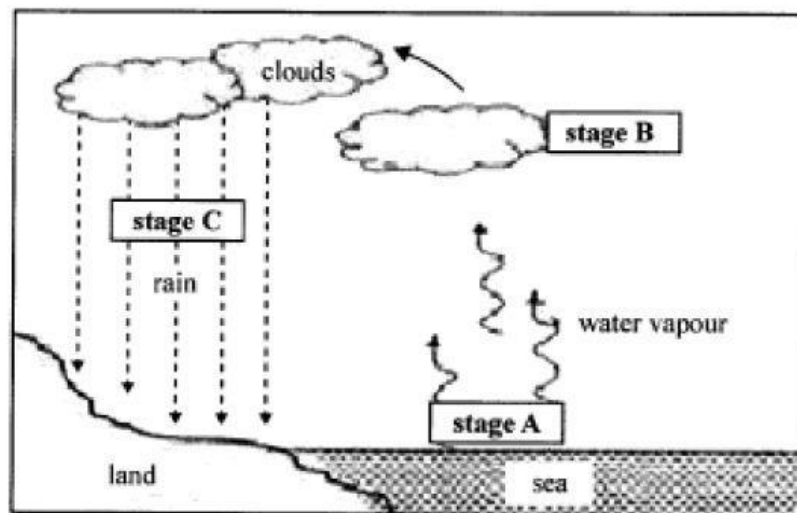
- (a) (i) Name gas X.
_____ [1]
- (ii) Name the property of gas X which makes it ideal for use in soft drinks like sodas.
_____ [1]
- (iii) Write the chemical formula for gas X and draw its molecular structure in the boxes.
- | | | |
|---------------------|--|-----|
| chemical formula | <div style="border: 1px solid black; width: 150px; height: 25px;"></div> | [2] |
| molecular structure | <div style="border: 1px solid black; width: 150px; height: 50px;"></div> | [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]