

Task

Decide whether each statement is true (T) or false (F). For those that are false, rewrite the statement to be true.

The Earth's early atmosphere consisted mainly of methane with traces of carbon dioxide, nitrogen and water vapour.	T/F
The main source of the gases in the Earth's early atmosphere was volcanic eruption.	T/F
As the Earth gradually cooled down, the water vapour in the atmosphere cooled and condensed to form the oceans.	T/F
Methane from the atmosphere dissolved in the oceans, so the relative amount present, fell over time.	T/F
Algae evolved and used carbon dioxide from the atmosphere for photosynthesis.	T/F
Algae respired, producing oxygen, which was released into the atmosphere.	T/F
Carbon dioxide in the sea reacted with metal oxides to form insoluble carbonates locking up carbon dioxide.	T/F
Over the past 200 million years the amount of CO ₂ in the atmosphere has remained relatively stable at 0.04%.	T/F
The amount of oxygen in the air is 78%.	T/F
The main greenhouse gases are ozone, carbon dioxide and water vapour.	T/F
Deforestation reduces the amount of carbon dioxide in the atmosphere, because animals and plants produce carbon dioxide in respiration.	T/F
Global warming is causing increasingly common weather events such as storms.	T/F
Carbon footprint is the amount of carbon dioxide something produces.	T/F
Sulfur dioxide triggers asthma.	T/F
Acid rain is produced by sulfur dioxide and nitrous oxides.	T/F

Suggested answers

The Earth's early atmosphere consisted mainly of methane with traces of carbon dioxide, nitrogen and water vapour. The Earth's early atmosphere was mainly carbon dioxide with traces of the other gases.	F
The main source of the gases in the Earth's early atmosphere was volcanic eruption.	T
As the Earth gradually cooled down, the water vapour in the atmosphere cooled and condensed to form the oceans.	T
Methane from the atmosphere dissolved in the oceans, so the relative amount present, fell over time. Carbon dioxide from the early atmosphere dissolved in the oceans.	F
Algae evolved and used carbon dioxide from the atmosphere for photosynthesis.	T
Algae respired, producing oxygen, which was released into the atmosphere. Photosynthesis in algae produced oxygen; respiration used oxygen.	F
Carbon dioxide in the sea reacted with metal oxides to form insoluble carbonates locking up carbon dioxide.	T
Over the past 200 million years the amount of CO ₂ in the atmosphere has remained relatively stable at 0.04%.	T
The amount of oxygen in the air is 78%. The amount of oxygen in the air is 21%; nitrogen comprises 78%.	F
The main greenhouse gases are ozone, carbon dioxide and water vapour. Ozone is not a greenhouse gas; the three main ones are carbon dioxide, water vapour and methane.	T
Deforestation reduces the amount of carbon dioxide in the atmosphere, because animals and plants produce carbon dioxide in respiration. It increases the amount of CO₂ which would have been used for photosynthesis by the trees.	F
Global warming is causing increasingly common weather events such as storms.	T
Carbon footprint is the amount of carbon dioxide something produces. Carbon footprint is the measure of carbon dioxide emitted over the life cycle of a product, event or service.	F
Sulfur dioxide triggers asthma. Nitrous oxides trigger asthma.	F
Acid rain is produced by sulfur dioxide and nitrous oxides.	T