

Solutions

2.1 Photosynthesis.

2.2 It condensed to form the oceans.

2.3 Nitrogen ~78–80 %; oxygen ~20–21 %.

3.1 No measurements from the time exist; the atmosphere can only be inferred indirectly – from gases in ancient ice cores and comparison with other planets.

3.2 Dissolving in the oceans – CO_2 is soluble and formed carbonate sediments via shells/skeletal remains; photosynthesis by algae and plants absorbed CO_2 , locking the carbon into living matter and eventually fossil fuels.

3.3 The oceans formed when water vapour condensed as the planet cooled; they dissolved large amounts of CO_2 , removing it from the air; marine organisms used the dissolved carbon to make carbonate shells, which became sediments – permanently storing carbon.