

## C1 - Chemistry of the Earth

1. How can nitrogen, hydrogen, carbon monoxide and form amino acids?
2. Why don't scientists know for sure how life began?
3. What causes the amount of carbon dioxide to increase rapidly?
4. What do we mean by 'locked up carbon'?
5. What causes carbon dioxide to be removed from the atmosphere?
6. What causes carbon dioxide to be released into the atmosphere?
7. Why is the Urey-Miller experiment not fully reliable?
8. What is the composition of the atmosphere?
9. The early atmosphere contained mainly carbon dioxide (95%), methane, ammonia and water vapour. Where did these gases come from?
10. Describe what happened to the gases that made up the early atmosphere (ammonia, methane, carbon dioxide).
11. How did the oceans form?
12. Nitrogen boils at  $-196^{\circ}\text{C}$ , methane at  $-169^{\circ}\text{C}$ . If the temperature is  $-179^{\circ}\text{C}$ , what is the state of nitrogen and methane?
13. Describe fractional distillation of air.
14. Where do earthquakes happen?
15. How do new islands form?

16. How do earthquakes form?
17. What is the name of the super continent?
18. What causes continental drift?
19. Why did no one believe Alfred Wegener?
20. Describe Alfred Wegener's idea of how continents formed.
21. How did other scientists explain matching fossils in Africa and South America?
22. What evidence do we have that continental drift is happening?
23. How did scientists before 1900 explain mountain formations?
24. Why is it difficult to predict earthquakes?
25. Why are not all earthquakes reported in newspapers?