

## Mark schemes

**Q1.**

- (a) (the percentage of) nitrogen increased 1
- (because of intense) volcanic activity 1
- (b) (the percentage of) carbon dioxide decreased 1
- (because) carbon dioxide dissolved in oceans  
**or**  
 (because of) formation of carbonate (precipitates / sediments)  
*do **not** accept references to photosynthesis* 1
- (c) (the percentage of) carbon dioxide decreased  
**and**  
 (the percentage of) oxygen increased 1
- the increase and decrease (in percentage) occur at the same / similar rate  
*allow the changes (in percentage) are the same / similar in the same period of time* 1
- (d) photosynthesis  
*allow a description of photosynthesis* 1
- (e) plankton (died)  
*allow tiny marine organisms (died)* 1
- and (the organisms) were covered by sediments  
*allow and (the organisms) were buried*  
*allow and (the organisms) were in anaerobic conditions* 1
- and subjected to high temperature  
**and**  
 high pressure (over millions of years) 1

**[10]**