

4. a) What is an interglacial period? **[1 mark]**

b) How frequently do warm interglacial periods occur? **[1 mark]**

c) Has Earth spent more time in cold ice age periods or in mild interglacial periods over the past 400 000 years? **[1 mark]**

5. Explain what is an El Nino event. **[3 marks]**

6. What is an upwelling? **[2 marks]**

7. Scientists are concerned that global warming will become a positive feedback loop. Explain what is a positive feedback loop and its relationship to the albedo effect. **[3 marks]**

8. White paint on the road tends to be more slippery than black asphalt when ice forms. Explain this observation using the albedo effect. **[2 marks]**
9. What colour clothing would you wear to stay cool on a hot summer day? Use what you know about the albedo effect to explain your answer. **[2 marks]**
10. Grass has an albedo of about 0.20 and rock has an albedo of about 0.30. Which will reflect more of the Sun's radiation, grass or rock? Explain why. **[2 marks]**
11. The Gulf Stream carries warm water past the west coast of Europe. How would you expect this current to affect the climate of the west coast of Europe? **[2 marks]**
12. Provide two examples for each of the following: **[6 marks]**
- a. Convection
 - b. Conduction
 - c. Radiation