

**3.2b** There is a small chance that the Earth could collide with an asteroid.

Complete the passage below.

Sometimes an asteroid collides with a .....  
 or a moon. So there is a very small risk of .....  
 with an asteroid big enough to destroy .....  
 One theory to explain how dinosaurs .....  
 that a large asteroid collision made .....  
 for them. We can see impact craters on the .....  
 to see them on the Earth as they are likely to be .....  
 by sea or vegetation.

**3.2c** Scientists disagree about the reasons why dinosaurs became extinct.

Scientists looked for events that happened at about the same time that dinosaurs became extinct, about 65 million years ago. Two theories have been put forward:

- ⇒ asteroid strike
- ⇒ massive eruption

Evidence has been found:

- A** An iridium layer dated at 65 million years ago has been found in rocks in many parts of the world. Asteroids and planet cores contain iridium in similar concentrations.
- B** Larger than usual eruptions of lava took place in what is now India between 63 and 68 million years ago.
- C** Eruptions can release
  - ⇒ poisonous gases
  - ⇒ dust clouds that block the Sun's heat and light
- D** Not all large eruptions of lava in the past caused mass extinctions.
- E** A large impact crater of the right date was discovered in Mexico.
- F** Extinctions began before the asteroid struck.

**a** Choose evidence from the list **A–F** for and against the two theories in the table.

Theory	For	Against
asteroid strike		
massive eruption		

**b** Give a mechanism for how each event could cause mass extinctions:

- i** An asteroid strike: .....