WHAT KILLED THE DINOSAURS?

Where did they go?

For thousands of years, people have found unusual old bones called fossils. There have been many theories about these discoveries. Many people originally thought these were the remains of giant gods or monsters. It wasn’t until the nineteenth century that fossils were identified as being remains of dinosaurs. Part of the problem was that it was rare to find a complete fossilized skeleton so people could not imagine what a dinosaur looked like.

One of the first most successful dinosaur hunters was a young English girl, named Mary Anning (1799-1847). When Mary was only twelve years old, she excavated the world’s first Ichthyosaur, an ancient reptile that lived in the sea. Mary sold this and other fossils to scientists who used her work to become famous. These scientists included Sir Richard Owen (1804-1892), who invented the name dinosaur. The last dinosaur suddenly became extinct about 65 million years ago – but not because of people. Although many movies show people battling vicious dinosaurs, people and dinosaurs are separated by 63 million years. The disappearance of dinosaurs remains a perennial fascination, and countless theories have arisen to explain it. These range from the unlikely (they all caught the same disease) to the bizarre (aliens ate them.). Other theories are harder to dismiss. Some of the main ones have to do with mammals, parasites, insects and poisonous plants.

Small rat-like mammals lived at the same time as the last dinosaurs and may have aggressively eaten dinosaur eggs. If the dinosaur could not produce healthy young, there would be no more dinosaurs. Alternatively, small parasites in the stomachs of dinosaurs may have made them sick. Insects such as lice and flies, may have driven them mad- so mad that they could not look for food. Or was it poisonous plants? If such plants stopped herbivores from eating them, then carnivores would have starved, too. However, these theories don’t explain why marine reptiles, such as early sharks and whales, also died out.

Vocabulary:
- Alternatively (adv) used to suggest an alternative to your first suggestion
- Bizarre (adjective) very unusual and strange
- Carnivore (noun) an animal that eats meat
- Extinct (adjective) a type of animal or plant that only eats plants
- Lice (noun) small insects that live on the skin and hair of animals and people
- Mammal (noun) a type of animal that only eats plants
- Parasite (noun) a plant or animal that lives on or in another plant or animal and gets food from it.
- Perennial (adjective) happens often or continues for a long time
- Reptile (noun) an animal such as snake or lizard that lays eggs, and whose blood changes
I) Answers these questions.

1) What different ways might dinosaurs have become extinct?
_______________________________________________________________________.

2) How many years separated dinosaurs and people?
_______________________________________________________________________.

3) What did carnivorous dinosaurs eat?
_______________________________________________________________________.

4) How could insects drive a dinosaur mad?
_______________________________________________________________________.

5) Why is the idea of aliens eating dinosaurs a bizarre theory?
_______________________________________________________________________.

Understand what you read

Adjectives and adverbs
Adjectives – modify nouns and identify or quantify a noun or a pronoun. An adjective usually comes before the noun it modifies.

Adverbs modify verbs and describe how something is done. Adverbs modify verbs, adjectives, other adverbs, phrases and clauses. An adverb indicates manner (badly), time (slowly), frequency (twice), degree (quite) or place (upstairs) and answers questions such as how, when, where and how much. Many adverbs end in –ly and can be found in different places in a sentence.

Here are four tips for working with adjectives and adverbs:

✔ Not all words that end in –ly are adverbs
✔ Adjectives include colours and numbers
✔ Many adverbs of place can also be prepositions
✔ Adverbs can modify adjectives, phrases, sentences and other adverbs.

Underline the adjectives and circle the adverbs.

1) The largest dinosaurs only ate easily-found vegetation

2) Dinosaurs could have been green or pink; fossils don’t show colours.

3) People searching hard for dinosaurs should look at their modern relatives: chickens.

4) Dinosaurs gradually evolved over millions of years into gint creatures.

5) The last dinosaurs quickly died together around the same time.
An Explosive End?

Scientists are still looking for a theory to explain the death of the dinosaurs. Especially something that explains why it happened so quickly, over such a large area. One of the theories is based on volcanic eruptions. The most dangerous eruption of modern times was in 1815. Mount Tambora in Indonesia, shot out fifty cubic kilometers of ash. Some of this ash went straight up for forty-three kilometers. The sun was partly blocked and the entire world cooled by as much as 3°C. A year after the eruption, parts of Europe and North America were so much colder, that it was known as the year without summer. Less sunlight reached the Earth and ash covering the plants meant food crops could not grow. About ninety-two thousand people died, most from starvation.

Volcanoes can kill in other ways. They can produce gases that choke people. Some volcanoes cause earthquakes and giant tidal waves. Sometimes a volcano’s lava and ash buries an entire city.

Volcanologists (scientists who study the eruptions of volcanoes) are specifically interested in the impact of ash blocking the sun and lowering global temperatures. They wonder why this might have affected dinosaurs worldwide - and how it might one day affect us. This happens not only from the volcano itself, but also from the smoke of the forest fires it starts. What would happen if there were thousands of major volcanic eruptions at the same time? The world would become colder and the air would become unbreathable. Dinosaurs and sea creatures would die. Was this how the dinosaurs died?

Another leading theory has to do with a large meteorite striking the Earth, sending up dust, and starting forest fires and tidal waves. Such meteorite may even have started a chain of volcanic eruptions, causing incalculable damage. But, whatever killed the dinosaurs, we still don’t understand why some species, such as frogs survived.

Vocabulary:
Erupt (verb) if a volcano erupts it sends out smoke and fire into the sky
Incalcuble (adjective) too great to be measured
Lava (noun) hot melted rock that flows from a volcano
Meteorite (noun) a small meteor that has landed on the Earth’s surface

Choose the best answer.

1) What is the most unlikely theory for dinosaurs becoming extinct?
   a- They all caught the same disease.
   b- Rat-like mammals ate their eggs.
   c- Small parasites made them sick
   d- Aliens ate them

2) People did not kill the dinosaurs, because______________.
   a- people were fascinated with dinosaurs
   b- people were battling dinosaurs
   c- dinosaurs were bigger
   d- they don't live at the same time.
3) By reading the bold lines in the last paragraph of the text *Where did they go?*, it can be inferred that _____________.

a- herbivores ate carnivores  
b- carnivores ate herbivores  
c- herbivores and carnivores ate poisonous plants  
d- plants stopped carnivores from eating

4) A synonym of alternatively is _________________.  
a- secondly  
b- contradictorily  
c- on the other hand  
d- whereas

5) Why don’t theories in the first paragraph explain why marine reptiles died out? 

a- They did not die out.  
b- They don’t eat plants  
c- The theories don’t affect reptiles  
d- The theories don’t affect marine life.

6) Volcanologists do not study _________________.  
a- why dinosaurs and marine creatures died  
b- the eruptions of volcanoes  
c- impact of ash blocking the sun  
d- lowering temperatures from forest fires.

7) Thousands of major volcanic eruptions occurring at the same time would not have made __________.  
a- the world become warmer  
b- meteorites add to the damage  
c- the air unbreathable  
d- dinosaurs die

8) A major meteorite striking the world would not _________________.  
a- send dust up into the air  
b- lower global temperatures  
c- make the dinosaurs extinct  
d- decrease the number of volcanoes

Extracts from: “Read and Think! 2”, A Reading Strategies Course – Kean Beatty. Ed Longman