

1 The Earth was incredibly different around 415 million years ago. There were only three continents – Gondwana, Siberia and Euramerica. Complex plants, with roots and

leaves, were only just beginning to grow on dry land, while fish grew legs and crawled out of the high seas. Scientists referred to this era as the *Devonian Period*.

2 Deep below the waves, the oceans were a soupy mass of life. Reef systems grew all throughout the warmer waters, with most life taking the form of coral, sea lilies, and other boneless creatures that built homes around themselves. Trilobites crawled along the bottom of the ocean, and jawless fish used their gills to eat food. This was also the time when a new species emerged in the ocean. Known as jawed fish, these creatures did not just eat by sucking prey in – they could actually bite and tear them apart. The absolute king of this new breed of fish was the gargantuan *Dunkleosteus*.

3 Have you ever had a nightmare where you were trapped in the ocean, far away from the safety of the sunlight? Suddenly, from within the gloomy depths, you sense the motion of a giant body. It glides beneath you, too far to be seen properly, but close enough that you can feel how immense it is. The *Dunkleosteus* was such a creature, a fish borne straight out of nightmares.

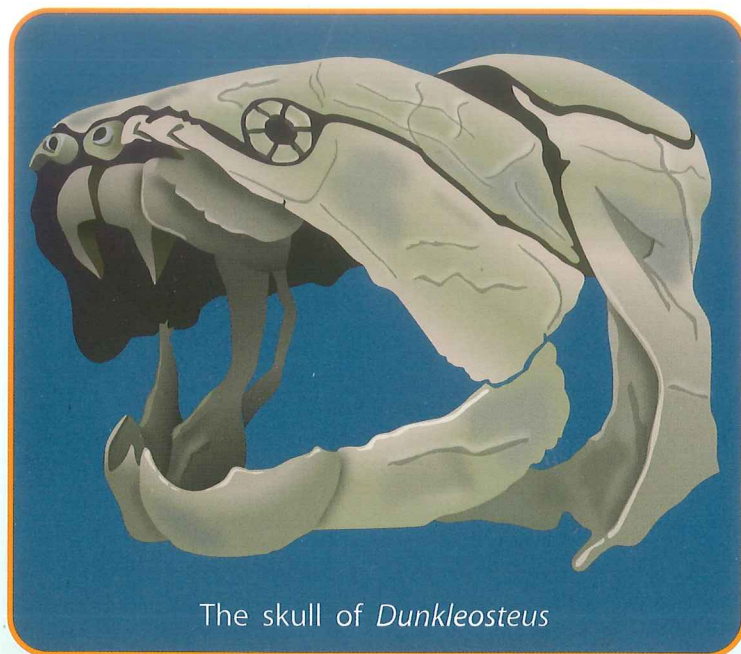
4 Up to ten metres in length, the nightmare fish had a thick body that tapered into an eel-like tail. It had two strong fins behind its gills and two, smaller fins just before its tail. While scientists can only guess as to the colour of its skin, it is assumed that it was mottled grey and black, with a slight purplish tinge around its belly. The only part of the *Dunkleosteus* that survives in fossils today is its most terrifying feature. Unlike the soft, scaly flesh of most modern fish, the entire front part of

the *Dunkleosteus* was covered in vicious armour plating. There were no teeth in its mouth. Instead this monster had two, sharp bone blades that could chop its food in half.

5 Due to its size, the *Dunkleosteus* was the ruler of the oceans. This slow-moving fish would devour anything that came within its reach. Its speedier rival, the newly evolved shark, hunted down prey, while the *Dunkleosteus* simply drifted through the ocean and opened its mouth. Powerful muscles allowed this horror to concentrate a force of up to 14,400 kg per cm² into its mouth blades. This makes the *Dunkleosteus*'s jaws about as strong as the modern crocodile's – but as its jaw was much bigger it would have done much more damage. The *Dunkleosteus* could also use its muscles to quickly open its jaws. This happened in about one-fiftieth of a second, creating a vacuum that would suck its prey into its mouth.

6 But, like all nightmares, the *Dunkleosteus* came to an end. In the last million years of the Devonian period, something tragic happened in the oceans of the world. Entire marine species were wiped out; the only reason we know that they ever existed is because of the fossils they left buried around the world. Scientists are not quite sure what happened to cause this. There may have been asteroids that hit the Earth, or a short Ice Age. Reef life was the worst affected, followed by the trilobites, jawless fish and the *Dunkleosteus*.

7 As the smaller marine life died, the slower Dunkleosteus found it harder to find food. The quicker sharks snatched up everything, which is why they have managed to stay alive to swim in our oceans today. The last Dunkleosteus died about 360 million years ago. From fossils, we know that this nightmare fish lived all over the world. Its remains have been discovered in North Africa, Europe and North America. There is also a fossil of its skull on display at the Queensland Museum in Brisbane, Australia. Here, at last, is the final resting place for the ancient king of the ocean, the nightmare fish, Dunkleosteus.



The skull of *Dunkleosteus*

Questions

- 1 Coral is an example of
 - a a jawless fish.
 - b a boneless creature.
 - c a trilobite.
- 2 The Dunkleosteus ate food by
 - a cutting prey as it entered its mouth.
 - b quickly hunting down prey.
 - c sucking prey in through its gills.
- 3 What was the colour of the tinge on a Dunkleosteus's belly?
 - a purple
 - b black
 - c grey
- 4 The most powerful part of a Dunkleosteus was
 - a its tail.
 - b its teeth.
 - c its jaws.
- 5 What definitely happened at the end of the Devonian period?
 - a asteroids hit the Earth
 - b some sea life species became extinct
 - c there was an ice age that affected marine life
- 6 The writer refers to the Dunkleosteus as the 'nightmare fish' because
 - a this fish only hunted for food at night.
 - b it had bigger jaws than many sharks.
 - c it is terrifying to think that such a creature ever existed.

Vocabulary

Find words in the text that match the meanings below.

The word is in the section shown in brackets.

- 7 Not the same (1)
- 8 Came out or appeared (2)
- 9 Brutal or fierce (4)
- 10 An empty space with no or little air (5)
- 11 Had an impact on (6)

Grammar

Articles (*the, a, an*) are words that are situated before a noun to show a specific or general thing.

E.g. **the** cat, **a** table, **an** apple.

Add an **article** to these sentences below from the text.

- 12 A thick body that tapered into ____ eel-like tail.
- 13 This happened in about one-fiftieth of ____ second.
- 14 Have you ever had a nightmare where you were trapped in ____ ocean?
- 15 Fish grew legs and crawled out of ____ high seas.

Back To The Text...

- 16 In the Devonian Era there were two continents.
 - a true
 - b false

17 The Dunkleosteus ruled the seas for millions of years.

- a true
- b false

18 The purpose of this text is

- a to recount.
- b to describe.

Think About This

19 The illustration on page 3 shows

- a the nightmare fish swimming along.
- b the outline of the nightmare fish.
- c the skull of the nightmare fish.

20 The word *absolute* in section 2 means

- a soluble.
- b new.
- c ruling.
- d supreme.

21 The word *mottled* in section 4 means

- a light.
- b blotchy.
- c soft.
- d striped.

22 The Dunkleosteus' bite did more damage than a crocodile's because

- a it could open its mouth quickly.
- b it had a bigger jaw.

23 The Dunkleosteus is best described as

- a fast and ferocious.
- b sluggish and voracious.
- c slow and timid.

Challenge Option



Drawing: The Nightmare Fish looked strange. Draw a strange but real animal.