

Lesson 9: The TRILOBITE & The CAMBRIAN EXPLOSION ... Proof of Evolution?



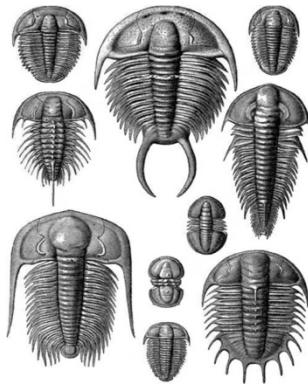
<https://youtu.be/fl7p27zDZcl?si=RwheLbtVVCUGykGv>
What is a Trilobite?
(A Quick Introduction)

Intro:

Darwinian Evolution states that all the forms of life have evolved from ... lifeless chemicals ... to single celled living organisms ... to simple creatures ... to more complex creatures ... to all the animals we see today.

If his theory is true, layers in the rocks should show the remains (fossils) of all the evolving creatures.

Most paleontologists label the rock formations by the fossils found there. The CAMBRIAN ROCK LAYER is considered to contain some of the oldest life forms. In that layer we find fossils of so many complex animals with various body plans. TRILOBITE fossils are found in the Cambrian Rock Layers.



TRILOBITES

Supposedly one of the oldest creatures present
problems for Darwin's Theory of Evolution!



Problem #1:

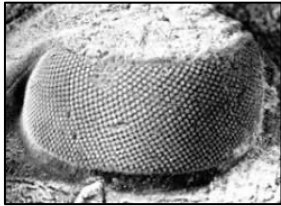
TRILOBITES ARE COMPLEX CREATURES!

1. Trilobites have _____ lobes (body parts.)
2. Their bodies are divided into many _____.

This allowed them to defend themselves by _____.

3. Trilobites have many _____ providing a very complex system of _____.

Examples of Trilobite EYES:



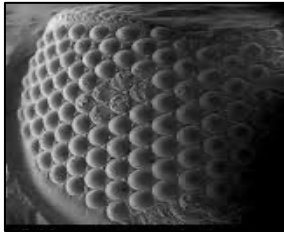
4. Trilobites had complex eyes.

Each eye had many (some had hundreds of)

_____.

The lenses were made of _____.

There are no animals before or since that have lenses made of this hard material.



The lenses allowed the trilobite to focus both _____

and _____ at the same time.



How did this complex vision help the trilobite?

Problem #2:

TRILOBITES SUDDENLY APPEARED FULLY FORMED.

Trilobites lived in the “Cambrian Sea” which was so full of varied life forms that it is called the **CAMBRIAN EXPLOSION**. Fossils show that there was a wide variety of animal life forms with complex bodies. **But there is no fossil evidence of ancestors.** Darwin knew that this was a problem for his theory.



There was much variation with species of Trilobites, but they clearly remained trilobites. They are similar to the horseshoe crab that is alive today, but there is clearly a limit to how much they can change.

Watch this video:
<https://youtu.be/E3opeBNTa0g?si=utomJmmKuCakqcx>
 Darwins Dilemma Chapter 2