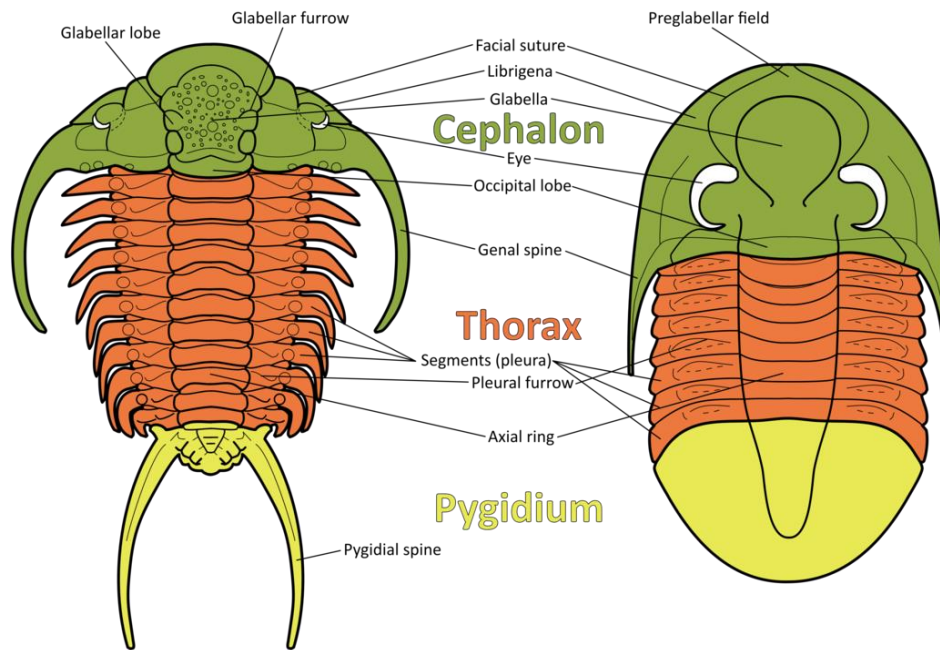


TRILOBITES: AN INTRODUCTION

TRILOBITES

Dorsal morphology



Key features of trilobites

(image from Wikimedia Commons, produced by Frederik Lerouge)

Trilobites are some of the most interesting and important creatures found in the fossil record. They were arthropods (the group that includes insects, spiders, crabs and centipedes) that lived in seas and oceans between ~521 and ~252 million years ago. The name 'trilobite' refers to the three lobes running from head-to-tail through their body. As shown in the figure, they also had three distinctive body regions: the head (cephalon), body (thorax), and tail (pygidium). Trilobites were unusual arthropods, having a mineralized exoskeleton, and were one of the first animal groups to evolve complex eyes.

More than 20,000 species of trilobites have been identified in the fossil record. They evolved in the Cambrian period of geological time, and were particularly diverse during that, and the subsequent Ordovician period. Many families died out in the late Ordovician mass extinction, ~444 million years ago, and many more in the late Devonian mass extinction, around 359 million years ago. The final trilobites disappeared during the end-Permian mass extinction. Almost 270 million years wasn't a bad run, though!

For all manner of fabulous trilobite facts and figures, you can't do better than Sam Gon III's website, www.trilobites.info.



TRILOBITES: AN INTRODUCTION

The GeoEd 'Trilobite Collection'

The GeoEd 'Trilobite Collection' comprises 13 museum-quality replicas, handmade in The Fossil Shop in Scarborough. The specimen list is as follows:

| Code | Species name | Named by | Age | Where from? |
|---------|---------------------------------|---------------------|---------------|-------------------|
| ST 9.1 | <i>Sphaerexochus mirus</i> | Beyrich, 1845 | Silurian | Malvern, UK |
| ST 1.0 | <i>Calymene blumenbachii</i> | Brongniart, 1817 | Silurian | Dudley, UK |
| DT 7.0 | <i>Cyphaspis ceratophthalma</i> | Goldfuss, 1843 | Devonian | Gees, Germany |
| ST 8.0 | <i>Leonaspis coronata</i> | Salter, 1853 | Silurian | Dudley, UK |
| OT 2.0 | <i>Onnia superba</i> | Bancroft, 1929 | Ordovician | Shropshire, UK |
| ST 16.2 | <i>Hemiargus scutalis</i> | Salter, 1873 | Silurian | Malvern, UK |
| ST 6.3 | <i>Acaste downingiae</i> | Murchison, 1839 | Silurian | Dudley, UK |
| OT 3.1 | <i>Asaphus cornutus</i> | Pander, 1830 | Ordovician | Russia |
| OT 15.0 | <i>Cybeloides girvanensis</i> | Reed, 1906 | Ordovician | Scotland |
| TT 1.0 | <i>Geragnostus callavei</i> | Raw, 1906 | Ordovician | Shropshire, UK |
| CAT 1.1 | <i>Phillipsia kellii</i> | Portlock, 1843 | Carboniferous | Yorkshire, UK |
| ST 3.11 | <i>Encrinurus tuberculatus</i> | Buckland, 1836 | Silurian | Dudley, UK |
| ST 32.0 | <i>Cybantyx anaglyptos</i> | Lane & Thomas, 1978 | Silurian | Herefordshire, UK |

If you're interested in learning more about trilobites, we offer an online 'Introduction to Trilobites' course, comprising three 1-hour classes in successive weeks. The GeoEd 'Trilobite Collection' is used as the teaching set for the course.

For details on all the online classes and events we run, please visit:

<https://hiddenhorizons.co.uk/collections/online-events>

