Historical GEOLOGY 102 Name:_____
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Trilobites

1. What phylum do trilobites belong to?

2. What other animals belong to this group?

3. List characteristics of this phylum.

4. Describe the skeleton and how this is a factor in the trilobites growth.

5. Why are the dorsal (top or back side) parts more commonly preserved?

6. Choose one of the fossils to draw and label the following parts: head or cephalon, thorax, pygidium, axial lobe, pleural lobes, eye, glabella, segments, facial suture, free cheek.

7. Describe the type of eye, mineral composition, and clarity and range of vision.

8. Describe the types of eyes that were characteristic of trilobites in free-swimming forms, burrowing forms, and bottom-crawling forms.

9. What is enrollment and how did it improve trilobites survivability? Draw one.

10. What are the three evolutionary directions taken by various types of trilobites?

11. Describe the lifestyles of carnivorous trilobites, deposit-feeders, and filter-feeders and the body types that match these types.

12. What time period has the highest diversity of trilobites. What happened to change this?

13. What caused the mass extinction of trilobites at the end of the Ordovician?

14. Measure the size of the parts listed in 6. for each of the fossils 1-12 in the lab trays (put this in a chart). Describe the distinguishing features of each fossil, listing the name, which of the fossils in the book that it most closely resembles, the family/order that it belongs to, and speculate on the environment and lifestyle that it might have lived.

15. What kind of fossil are No. 13 and 14? How do they differ from trilobites?