

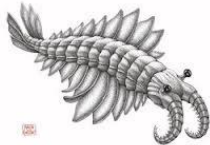
## Walking With Monsters – Before the Dinosaurs

Episode 1 “Water Dwellers”

### Cambrian Period, 530 Million Years Ago

1. The evolution of eyes led to an arms race between arthropods and vertebrates. List specific adaptations demonstrated by *Anomalocaris* and *Haikouichthys*.

**Anomalocaris**



**(Arthropod)**

**Haikouichthys**



**(Vertebrate)**

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### Silurian Period, 418 Million Years Ago

2. What are the advantages of having an endoskeleton (inner backbone) compared to an exoskeleton?
3. *Cephalaspis* was a jawless fish that developed many adaptations that *Haikouichthys* did not have. List them.
4. Why did some of the early vertebrates begin migrating into freshwater inland?
5. What was the atmosphere on Earth like at this point?

6. Why were arthropods like *Brontoscorpio* so much more well-equipped for living on dry land than other animals?

## **Devonian Period, 360 Million Years Ago**

7. *Hynierpeton* is one of the earliest known amphibians. What is unusual about these animals? How were they well-adapted for the atmosphere during this period?
8. The *hynierpeton* males are shown performing a mating ritual to attract females. Describe the ritual. What traits might this display have been advertising to females?
9. What changed about eggs that allowed reptiles a greater range on land?
10. What phylum of animal is shown at the end preying on the reptile eggs?