

Weekly assignment 8: Dinosaurs

Due: Monday, December 3, 2007

The Colossal Fossils exhibit at the Pacific Science Center is a unique opportunity to examine some of the fabulous dinosaur specimens being unearthed in China, Mongolia and Chile.

1. How old is the **oldest** known dinosaur?

2. In what ways do dinosaurs differ from **reptiles**?

3. Both Lufengosaurus and Jingshanosaurus are plant-eaters. There are two kinds of plant-eaters: **browsers** and **grazers**. Browsers pluck leaves from tree branches; grazers chew grass and other low-lying plants. What type of plant-eater are these dinosaurs? What about their teeth and posture allows you to draw that conclusion?

4. Tuojiangosaurus is also a plant-eater. Was it a browser or grazer? What about its teeth and posture allows you to infer that conclusion?

5. Was Gigantosaurus a meat-eater or plant-eater? In what way does its teeth differ from the similarly-shaped teeth of Lufengosaurus and Jingshanosaurus?

6. Count the **toes** of the plant-eaters versus the meat-eaters. What is the difference?

7. Cretaceous China shares many of the same land (terrestrial) dinosaur fossils as western North America. What does this suggest about **the China plate** and **the North American plate**?

8. Psittacosaurus has no teeth. What did it eat, and how did it eat that?

9. In what **grain size sediment** were the dinosaur and other fossils preserved? What **rock** does that grain size sediment become?

10. How can you recognize a fossilized dinosaur **egg**?