## **Article-Based Observation: Q**

<b>Directions:</b> Read the article "What makes a dinosaur?" and then answer these questions:
1. What is the only characteristic currently known to be unique to all dinosaurs, and why is it important?
2. What are four other characteristics once believed to be unique to dinosaurs, but now known to have been shared by some other early reptiles? What other reptile(s) have the characteristic?
3. How did dinosaurs get their name, and why did paleontology seem less complicated back then?
4. What two extinctions helped to shape the evolution of dinosaurs, and what key characteristics likely helped dinosaurs survive?
5. What are the three major branches of dinosaurs as discussed in the article?

6. What is the traditional view of the relationships among these three branches of dinosaurs, and what evidence supports it?
7. What is the new hypothesis of the relationships among these three branches of dinosaurs, as proposed by Matthew Baron, David Norman and Paul Barrett, and what evidence supports the hypothesis?
8. Why did paleontologists decide to essentially repeat the new family tree study? What did the replication study find?
9. How could you summarize two main points of the article?
10. What other questions do you still have after reading the article?