

Name _____

Date _____ Class _____

4 *The Dinosaur Heresies*

—Robert T. Bakker, Ph.D.

Synopsis

When paleontologists first discovered dinosaur bones and fossils, they developed many theories about how dinosaurs lived and what their environment was like. By the early 1900s, the traditional theories regarding these animals and their extinction were established and, for the most part, unchallenged. *The Dinosaur Heresies* sets forth Robert Bakker's new theories, or "heresies," contradicting the established theories about dinosaurs' cold-bloodedness, activity, intelligence, and extinction. The evidence and logic he uses to refute orthodox theories are presented in a detailed, descriptive narrative along with his own illustrations depicting the dinosaurs' anatomical structure, appearance, movements, and changes through time.

Bakker refuses to view dinosaurs as a dynasty of flawed creatures. Bakker believes they were warm-blooded, agile, and intelligent. Although they are extinct, their long existence on the Earth attests to a highly successful segment of evolution. As evidence, he cites examples of fossils and draws parallels to modern animals. He asserts that birds are direct descendants of dinosaurs. Bakker feels that dinosaurs made a significant contribution to plant evolution as well.

Challenging the notion that dinosaurs are lowly reptiles, Bakker vigorously argues that they should be scientifically reclassified and that new terminology should be used to study them. He suggests and supports a theory that Dinosauria should be a separate classification containing all the known species of dinosaurs.

Student Focus

As you read, you should be aware of Bakker's descriptions and details that employ the literary elements of imagery and analogy. How does the validity of the evidence and arguments that Bakker uses challenge orthodox dinosaur theories? What are the evolutionary implications of his theories?

Correlation to Subject Matter

Paleontology, Evolution, Genetics, and Anatomy