



USEFUL VOCABULARY

Cretaceous
ecosystem
erosion
extant
Megalodon
paleontology
sediment
Triassic
upwelling

CHAPTER 1 (1:00–6:30)

1. What subjects of study are included in paleontology?
Animals; plants; ecosystems; behavior; links between life today and life millions of years ago.
2. Why were so many types of fish and other organisms living in the Aurora area long ago?
Coastal upwellings delivered lots of food, nourishing many creatures.
3. How did walruses and seals (which evolved on the West Coast) end up on the East Coast?
They migrated to Central America when there was no land bridge and crossed over and up the East Coast.

CHAPTER 2 (6:30–9:02)

4. What types of organisms does Trish Weaver study?
Invertebrates: clams, oysters, snails, scallops, corals, barnacles, whelks.
5. Where are whelks, microorganisms and clams positioned in the food chain?
Microorganisms (in upwellings) → clams → whelks.

CHAPTER 3 (9:02–13:41)

6. About how old are the fossils of the Cape Fear River area?
75 million years old.
7. Name some organisms we would expect to see in this river basin during the Cretaceous period.
Baldcypress, tulip poplar, giant turtles, giant crocs, cicadas, duck-billed dinosaurs, large carnivorous animals.
8. The fossils in the Cape Fear River Basin are similar to fossils in western Canada and Asia. How is this possible?
The landmass that is now North America was split by a big seaway.

CHAPTER 4 (13:41-17:45)

9. Julia Clarke is doing research on the origin of all living birds. How long ago did bird flight evolve?
140 million years ago.
10. What is one way that the ancient birds of the Cape Fear River Basin were different from today's birds?
The fossil birds have teeth.

CHAPTER 5 (17:45-23:20)

11. West and south of Raleigh is a huge Triassic Basin. How old are the fossils found there?
220 million years old.
12. During the Triassic Period, many new organisms evolved. What is one reason for this?
A previous mass extinction wiped out 95 percent of the species on Earth.