CHAPTER 1 (2:00–7:27)

1. How many species of butterflies are there in North Carolina?
   How many species of moths?
   *There are about 180 species of butterflies and between 2,000 and 3,000 species of moths.*

2. What important role do butterflies and moths play in North Carolina’s ecosystems?
   *They are an important part of many food webs: caterpillars provide food for birds; adult butterflies and moths provide food for birds, bats, lizards, and frogs. Butterflies and moths are also important pollinators of many flowers.*

3. What are the four stages of a butterfly’s life cycle?
   *Egg, caterpillar, chrysalis, adult.*

4. How long do butterflies live?
   *From as little as one week to as long as eight months.*

CHAPTER 2 (7:27–11:06)

5. What is a host plant?
   *A host plant is a plant that caterpillars feed upon.*

6. What is a nectar plant?
   *A nectar plant is a plant from which adult butterflies get nectar.*

7. What is a “puddle party”?
   *A puddle party is a gathering of butterflies in a muddy area where they can obtain salt and nutrients.*

8. When is the best time to see butterflies? Why?
   *A warm, sunny day is the best time to see butterflies. Because they are cold-blooded, butterflies need warmth to fly. Butterflies are best seen on sunny, warm days because they are cold-blooded insects and do not fly when it is cool or rainy.*

Regal moth photograph courtesy of N.C. Wildlife Resources Commission.
CHAPTER 3 (11:06–18:27)

9. What are the main differences between butterflies and moths?
Moths typically fly at night, and butterflies fly during the day. The antennae of butterflies are simple, straight rods with knobs at the end; the antennae of moths take varying forms and do not have knobs at the ends.

10. What is the difference between incomplete metamorphosis and complete metamorphosis?
A creature that undergoes incomplete metamorphosis hatches as a miniature version of its adult form, for example, a cricket. In complete metamorphosis, the adult looks nothing like the juvenile. A butterfly, for example, hatches as a crawling caterpillar that eats leaves and transforms into a winged creature that thrives on nectar.

CHAPTER 4 (18:27–END)

11. Do caterpillars harm trees?
No, defoliation does not usually harm trees, since they will shed their leaves or needles anyway. Caterpillar excrement also provides fertilizer for the trees.

12. How do butterflies and moths protect themselves from predators?
Butterflies’ bright colors warn predators that eating them would make them sick; some butterflies and moths disguise themselves as leaves or bark; moths have a hearing mechanism that enables them to detect and avoid bats.

13. Name some trees and plants you can grow to attract butterflies.
Trees: oak, sweetgum, cherry, pawpaw, willow.
Smaller plants: lilies, coneflower, buttonbush, milkweed, bee balm.