

Advanced Entomology for Middle School

Entomology · Answer Key · 8 Questions

1. Which insect order is characterized by the presence of hemelytra, forewings that are hardened at the base and membranous at the tips, and piercing-sucking mouthparts?

- A) Coleoptera
- B) Hymenoptera
- C) Hemiptera**
- D) Lepidoptera

2. The process by which an insect undergoes a complete metamorphosis involves distinct stages. Which of the following is the correct sequence for holometabolous development?

- A) Egg, larva, pupa, adult**
- B) Egg, nymph, adult
- C) Egg, adult, larva, pupa
- D) Egg, larva, adult, pupa

3. In insect anatomy, the exoskeleton is primarily composed of which chitinous polysaccharide?

- A) Cellulose
- B) Keratin
- C) Chitin**
- D) Peptidoglycan

4. Which of the following is NOT a characteristic feature of insects?

- A) Three body segments (head, thorax, abdomen)
- B) Six legs attached to the thorax
- C) Two antennae
- D) A backbone**

5. The spiracles in insects serve as openings for what physiological process?

- A) Digestion
- B) Reproduction
- C) Respiration**
- D) Circulation

6. Insects belonging to the order Diptera are distinguished by having:

- A) Two pairs of membranous wings
- B) Forewings modified into elytra
- C) Hindwings reduced to halteres**
- D) Forewings covered in scales

7. What is the primary function of the ovipositor in female insects?

- A) To secrete defensive chemicals
- B) To sense vibrations
- C) To deposit eggs**
- D) To feed on nectar

8. Which term describes the process where an insect sheds its exoskeleton to allow for growth?

- A) Metamorphosis
- B) Pupation
- C) Ecdysis**
- D) Diapause