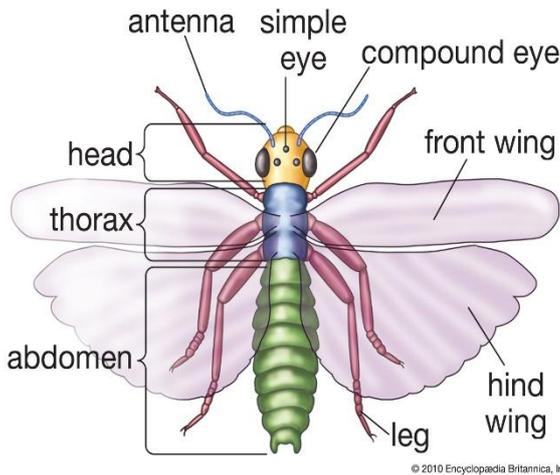


Exercise A: Complete the text with the words below.

appearance	according	second	fluid	lays
adult	maturity	increase	damage	therefore
consists	latter	vision	legs	cocoon
adapted	food	occurs	social	depending

Insects are classified as arthropods, i.e. they have jointed **1** They have segmented bodies which are enclosed by a hard and rigid exoskeleton or external skeleton. Although the skeleton is hard, the area between the segments is soft and **2** the insect is flexible. The body of an insect is divided into three parts: the head, the thorax and the abdomen.

The anterior or head region contains the brain and carries several sensory organs: the compound eyes, the simple eyes, the antennae and mouthparts. The compound eye is composed of numerous units which function together to provide a mosaic **3**..... Simple eyes are sensitive to light intensities, but do not form images.



The mouthparts of an insect vary **4** on the method of feeding used by the insect, but the most common types are the chewing mouthparts and the piercing/sucking mouthparts. Caterpillars, locusts and beetles have the former, while aphids, cicadas and mosquitoes have the **5**.....

The middle region, the thorax, bears three pairs of legs and in some insects, two pairs of wings. The legs are **6** for different functions: fossorial for digging, flat and fringed for swimming and enlarged for jumping.

The posterior region of the body is the abdomen, which usually **7** of twelve segments. It contains the reproductive organs of the insect and, in some cases, a sting which is used to paralyse prey or to defend the nest or **8**..... group.

Insects undergo changes as they **9** in size and maturity. These changes are described as metamorphosis. One type of metamorphosis, incomplete metamorphosis, **10** in many important tropical pests, e.g. locusts and aphids. The insect passes through three distinct forms: egg, nymph and adult. In the case of aphids, the female **11** eggs on a leaf which becomes the food store for the nymphs, i.e. the young insects. The nymphs feed by piercing the leaf with their mouthparts and sucking the **12** from the leaf. When the number of aphids on a plant exceeds the number that can be supported by the plant, some of them grow wings and fly to new plants. Thus, if they are not controlled they can easily destroy a crop. The nymph reaches **13** in about a week.

In a **14** type of metamorphosis, complete metamorphosis, the insect develops through four stages: egg, larva, pupa and adult. Like insects showing incomplete metamorphosis, the adult female lays eggs on a suitable host. However, in insects showing complete metamorphosis, e.g. flies and beetles, the eggs hatch into larvae. The larval stage is a feeding stage and is remarkably different from the adult in **15**, usually in habitat, and in food consumed. Many larvae cause serious **16** to crops. For example, the cotton stainer kills cotton bolls and the stalk borer makes holes in the stems of maize plants and eats the leaves and cobs. When the larvae are fully fed they form a **17**..... and the pupal stage begins. During the pupal stage the insect changes in form from the larva to the **18**.....insect.

Exercise B: Match the words from the text with their meaning on the right.

- | | |
|--------------------------|-----------------------|
| 1. i.e. (id est) | a. to contain |
| 2. e.g. (exempli gratia) | b. to open |
| 3. to enclose | c. so |
| 4. anterior | d. to make a hole |
| 5. posterior | e. to happen |
| 6. former | f. for example |
| 7. latter | g. front |
| 8. to bear | h. first / previous |
| 9. to occur | i. that is to say |
| 10. to pierce | j. to carry / produce |
| 11. therefore | k. second / last |
| 12. to hatch | l. back |



a colorado beetle

Exercise C: Put words from the text into the sentences below.

1. The shell of an egg the yolk and albumen.
2. Olive treesfruit in the autumn.
3. Germinationif temperature and humidity levels are good.
4. Larvae appear when the insect eggs.....
5. Cereal crops,wheat and barley, are important food sources all over the world.
6. A scorpionits prey with its sting and injects poison.
7. The weather is very hot and dry in summer. It isnecessary to irrigate the fields.
8. Germination cannot if the temperature is too low.
9. Metamorphosis and photosynthesis are two important processes. The is carried out by insects and the by plants.
10. The head is the region of an insect and the abdomen is the region.

Exercise D: Complete the sentences about insects.

1. An arthropod has.....
2. The stages of complete metamorphosis are.....
3. The compound eyes.....
4. The head contains.....
5. Simple eyes.....
6. Some insects have a sting for.....
7. Insects are flexible because.....
8. The most common mouthparts are.....
9. The thorax carries.....
10. Jumping insects have.....

Exercise E: Answer the questions about the text with **complete** sentences.

1. What is an exoskeleton?
2. Describe the thorax.
3. How does the compound eye function?
4. Which types of mouthparts are most common?
5. How many legs do insects have?
6. What is the sting used for?
7. What are the stages of complete metamorphosis and incomplete metamorphosis?
8. What is a nymph?
9. Describe the larval stage.
10. What happens during the pupal stage?

Exercise F: Write 150-200 words about an important insect pest in Italy.

Include information about the following:

Latin name - appearance - life cycle - crop damage - control measures

a spittlebug

