

# Secondary

(Dragonflies of Our Parks and Gardens)

# Answer Key

**Answer Key (Dragonflies of Our Parks and Gardens)**

1. Odonata
2. head, thorax, abdomen
3. six
4. two
5. reproduce

	<b>Organism X</b>	<b>Organism Y</b>
Wing position when at rest	Its wings are <u>spread out</u> like an aeroplane when it is at rest.	Its wings are <u>held up</u> close together above its body when it is at rest.
Eyes	Eyes <u>touch</u> each other.	Eyes are <u>apart</u> .
Shape of eggs laid	<u>Round</u>	<u>Oval</u>
Type	6 (a) It is a <u>dragonfly</u> .	6 (b) It is a <u>damsel</u> fly.

- 7
- a) water flea, tadpole
  - b) great diving beetle, dragonfly nymph
  - c) algae → water flea → dragonfly nymph → great diving beetle  
**or** algae → tadpole → dragonfly nymph → great diving beetle
  - d) pond, stream or lake community
  - e) If the population of dragonfly nymphs were to decrease sharply, there would be a decrease in the number of predators of water fleas and tadpoles, so their populations would likely increase sharply. The primary food source of the great diving beetle would be decreased (although it would still have the water flea and tadpole as alternative food sources), resulting in a potential decrease in its population.

**Fun Facts**

1	True	Dragonflies and damselflies were on Earth more than 300 million years ago, even before the dinosaurs!
2	True	The largest dragonfly that ever lived had a wingspan of 72 centimetres! Found in the fossil record of the Permian period, it was also the largest insect in history.
3	True	Dragonflies are considered a delicacy in several Eastern countries. They have also been used in traditional medicine in China and Japan.
4	True	Dragonflies mate while they are flying. Appendages on the male's body lock into grooves on the female's body to secure them together in flight. After mating occurs, the female will usually lays eggs on a plant in the water.
5	False	Dragonflies have two pairs of eyes, with about 30,000 lenses in each eye; in contrast, humans only have one lens in each eye. These compound eyes help them see and sense movement in any direction. These eyes can perceive movement, colour, light polarisation and even UV light.
6	False	Before dragonflies start their day, they must warm up by exposing themselves to the sun. On cloudy or overcast days, dragonflies are rarely seen, because they need some heat to function. In the mornings, they can be found on various plants while basking in the sun to absorb heat, or can be seen making their own heat by shaking their wings. Once their bodies have been warmed up, it is take-off time.
7	True	Dragonflies are excellent indicators of freshwater quality. Adult dragonflies may also play an important role in controlling populations of other insects, including mosquitoes. In some tropical areas, dragonfly nymphs are intentionally kept in drinking water storage tanks to control larval mosquito populations.
8	True	The front wings are not attached to the back wings, so each set of wings can flap separately. The wings have tiny pockets that catch the tiniest gusts of wind so the dragonfly can easily take flight. They can fly in every direction, including backwards.

Crossword Puzzle

1. deforestation
2. delicacy
3. pollution
4. qualities
5. nymphs
6. populations
7. medicine