

# The Octopus — Eight Arms and a Brilliant Mind

Reading Worksheet — Level F | [tahricteaches.com](https://www.tahricteaches.com)



Few **creatures** in the ocean inspire as much wonder as the octopus. With eight muscular arms, three hearts, and bright blue blood, this remarkable invertebrate has fascinated scientists for centuries. More than 300 different species of octopus live in oceans around the world, from icy polar waters to warm tropical reefs. Some are no bigger than a coin, while the giant Pacific octopus can stretch its arms over six meters wide.

The most striking feature of the octopus is its astonishing **brain**. In fact, two thirds of its nerve cells are not in the brain itself but spread along its eight arms. Each arm can taste, touch, and even solve simple problems on its own. Scientists have watched octopuses unscrew jars, open lobster traps, and carry coconut shells as portable shelters. Few animals show such **complex** behavior outside of mammals and birds.

The octopus is also a master of disguise. Special cells in its skin called chromatophores allow it to change its color and texture in less than a second, making it almost **disappear** against coral, sand, or rock. This is one of the most advanced camouflage systems in the entire animal kingdom. When camouflage fails, the octopus shoots a cloud of dark ink and uses jet propulsion to **escape**, pushing water out of a special tube to dart away at high speed.

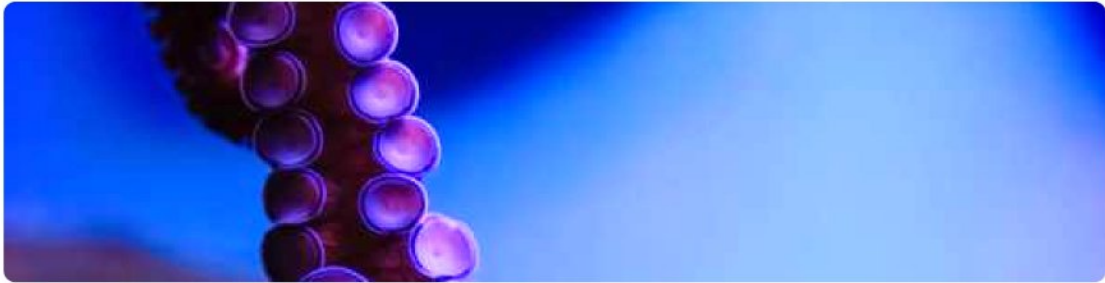
Sadly, the octopus does not live very long. Most octopuses **survive** only one to two years, even though they grow quickly and learn rapidly. A female octopus lays thousands of eggs, then guards them carefully without eating until they hatch. After that, she dies. This short life makes the **complex** behavior of the octopus even more impressive — it must hunt, hide, learn, and **adapt** to its surroundings all within a very short time.

Today, octopuses face new threats. Warming oceans, plastic pollution, and overfishing are damaging the coral reefs and rocky habitats they depend on to **survive**. **Protecting** healthy seas means protecting these **clever** creatures and the rich underwater **environment** they help keep in balance. The more we learn about the octopus, the clearer it becomes: this eight-armed wonder is one of the most amazing minds in the ocean.

## A. Vocabulary

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|----------------------|---|
| 1. creature ____     | a. the natural world; the surroundings in which living things exist |
| 2. brain ____        | b. to continue to live, especially in difficult conditions          |
| 3. complex ____      | c. to keep someone or something safe from harm                      |
| 4. disappear ____    | d. quick to learn and understand; intelligent                       |
| 5. escape ____       | e. to become impossible to see; to vanish from sight                |
| 6. adapt ____        | f. to change in order to fit a new situation or environment         |
| 7. survive ____      | g. a living thing, especially an animal                             |
| 8. protect ____      | h. the organ inside the head that controls thought and movement     |
| 9. clever ____       | i. made of many connected parts; not simple to understand           |
| 10. environment ____ | j. to get away from a dangerous or unwanted situation               |



## B. True or False

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1. The octopus has three hearts and blue blood. \_\_\_\_
2. More than 300 species of octopus live in oceans around the world. \_\_\_\_
3. Two thirds of the octopus's nerve cells are inside its main brain. \_\_\_\_
4. Octopuses have been observed unscrewing jars and using coconut shells as shelter. \_\_\_\_
5. Special skin cells called chromatophores allow the octopus to change color and texture. \_\_\_\_
6. The octopus uses jet propulsion to escape from danger. \_\_\_\_
7. Most octopus species live for ten to twenty years. \_\_\_\_
8. A mother octopus continues to hunt and eat while guarding her eggs. \_\_\_\_
9. Warming oceans and plastic pollution are threats to octopus habitats. \_\_\_\_



### C. Fill in the Blanks

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**Word Bank:** complex, adapt, survive, environment, clever

1. Few animals outside of mammals and birds show such \_\_\_\_\_ behavior as the octopus.
2. Because an octopus lives only one or two years, it must \_\_\_\_\_ to its surroundings very quickly.
3. Octopuses depend on healthy coral reefs and rocky habitats to \_\_\_\_\_.
4. Protecting the ocean \_\_\_\_\_ also protects the octopus and many other species.
5. These \_\_\_\_\_ creatures can open jars, solve puzzles, and even use tools.

### D. Comprehension Questions

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1. Describe the basic body of an octopus and how many species exist.
2. Explain why scientists call the octopus's nervous system unusual.
3. How does the octopus use color change and ink to defend itself?
4. Why is the short life of the octopus surprising given its intelligence?
5. What are the main threats facing octopuses today, and why does protecting them matter?

### E. Discussion Questions

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1. Some people refuse to eat octopus because of its intelligence. Do you think humans should avoid eating very smart animals? Why or why not?
2. If octopuses live only one or two years, why do you think they have evolved to be so intelligent? What is the benefit?
3. Imagine you had to design a new ocean park. What rules would you make to protect octopuses and the reefs they live on?



# Answer Key

## The Octopus — Eight Arms and a Brilliant Mind

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**A. Vocabulary:** 1-g, 2-h, 3-i, 4-e, 5-j, 6-f, 7-b, 8-c, 9-d, 10-a

**B. True/False:** 1-T, 2-T, 3-F, 4-T, 5-T, 6-T, 7-F, 8-F, 9-T

**C. Fill Blanks:** 1-complex, 2-adapt, 3-survive, 4-environment, 5-clever

**D. Comprehension:**

1. The octopus has eight muscular arms, three hearts, and bright blue blood. There are more than 300 known species, ranging from coin-sized to the giant Pacific octopus with arms over six meters wide.
2. Two thirds of the octopus's nerve cells are not in the main brain but spread along its eight arms, so each arm can taste, touch, and solve simple problems on its own.
3. Special skin cells called chromatophores let it change color and texture in less than a second to almost disappear against coral, sand, or rock. When that fails, it shoots dark ink and uses jet propulsion to escape.
4. Even though octopuses learn quickly and behave in complex ways, most species survive only one to two years — and female octopuses die after their eggs hatch, making their intelligence even more remarkable.
5. Warming oceans, plastic pollution, and overfishing damage the coral reefs and rocky habitats octopuses depend on. Protecting these habitats matters because it keeps both the octopus and the wider ocean environment in balance.