Octopuses

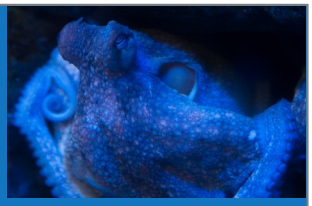
About the animals:

- There are approximately 300 species of octopus globally.
- Octopuses live in relatively shallow waters, with most species found less than 200m deep. The Giant Pacific Octopus is sometimes found at depths of 2,000 m.
- The plural of octopus is octopuses, not octopi, as the word originates from the Greek language, not Latin.
- Octopuses have no bones, the only hard part in an octopus is it's beak, inside it's mouth!

Meet our octopuses:

There are currently 3 species of octopus at the National Marine Aquarium:

Common Octopus



- **Name**: Noodles
- **Age**: Less than 1 year.
- **Favourite Food**: Prawn
- **Fun fact:** Common octopuses are classed as a ***cosmopolitan*** species, meaning they can be found all over the world!

Curled Octopus

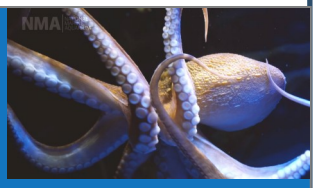
- **Name**: Inky
- **Age**: approx. 1 year
- **Favourite Food**: Cockles
- **Fun fact: Unlike larger species which can live for up to 5 years, the curled octopus has a lifespan of 2-3 years. Curled octopuses are commonly found around the U.K.**

Did you know?

Octopuses have 3 hearts. One is used to pump blood around the body, while the other 2 pump blood directly to the gills.

Octopuses have 9 'brains'. One central brain is used for overall control. At the base of each arm is a group of nerve cells which can control each arm independently, acting as smaller brains.

Giant Pacific Octopus



- **Name**: Neptune
- **Age**: approx. 3.5 years
- **Favourite Food**: Crabs
- **Fun fact:** Giant Pacific Octopuses are the largest species of octopus, able to reach 3m in length. The largest ever recorded weighed 71 kg (156lb)!

Why is octopus blood blue?

- Instead of having haemoglobin (an iron-based protein which takes oxygen and transports it around the body) in their blood, octopuses have **haemocyanin**, a **copper-based** protein.
- Haemocyanin functions in the same way as haemoglobin, but is much better at getting and transporting oxygen when there is less oxygen available, as is often the case where octopuses are found.
- This copper-based haemocyanin is the reason octopus blood is blue.

How can we help octopuses?

- One effect of climate change is **ocean acidification** (carbon dioxide in the atmosphere absorbing into the ocean, making the water more acidic).
- This makes **haemocyanin** less efficient—it can't get as much oxygen from the water to transport around the body, which makes it harder for octopuses to survive.
- Reducing our carbon dioxide emissions by using our cars less, or using less electricity at home, will make a huge difference to octopus survival!