

Fun Facts: Incredible Invertebrates



40 minutes



Age 7-11

1. Invertebrates are animals that do not have a backbone. Some common invertebrates are worms, snails, corals, sponges, insects, jellyfish, and crustaceans (Brusca and Brusca, 2003).
2. Invertebrates first evolved during the Cambrian Period, over 540 million years ago (Brusca and Brusca, 2003)
3. Over 95% of the 1.4 million known animal species are invertebrates (Smithsonian, 2018)
4. The largest invertebrate is the colossal squid which can weigh over 500kg and reach lengths of up to 14m (Ravaiolo and Youngster, 2012).
5. Corals are sessile invertebrates, meaning they are fixed in one place and unable to relocate. Corals grow at different rates, with some growing up to 10cm in one year and others only growing 0.3cm in one year (Barnes, 1987).
6. Many species of marine worms, such as feather duster and Christmas tree worms, survive by hiding their body in a tube attached to the reef. They feed by extending their gills into the water and catching phytoplankton and other microscopic organisms in the water column (NOAA, 2020).
7. Sea stars and sea urchins are some important species of invertebrates that have specialized organs called tube feet, which allow them to move and feed. The tube feet have two special types of cells. The first type of cell releases a glue-like substance that allows the tube feet to stick and hold onto different structures. The second type of cell releases a substance that breaks down the glue-like substance and allows the tube feet to release from the structure (Flammang et al., 2005).
8. Many small shrimps have symbiotic relationships with large fishes. These relationships consist of the shrimp cleaning parasites off the fish, allowing the fish to stay healthy and the shrimp to feed on the parasites they remove. Studies have shown the Pederson shrimp is the most effective cleaner (McCammon et al., 2010).



9. The queen conch is an invertebrate that belonging to the taxonomic group known as mollusks. All mollusks have a body wall known as the mantle. This mantle can secrete a shell in some species (NOAA, 2020).
10. The Caribbean spiny lobster is an invertebrate that preys on snails, crabs, and clams. These lobsters are nocturnal, meaning they are active and feed at night, and they spend most of the day hidden in burrows and dens in the reef (NOAA, 2020).
11. Many invertebrates such as corals, snails, clams, shrimps, and tube worms have a skeleton or shell made of calcium carbonate. Increased carbon dioxide dissolved in sea water makes the sea water more acidic. The more acidic sea water can dissolve the shells and skeletons on many organisms including invertebrates (NOAA, 2020). This is a very large threat to coral reefs!