


Jellyfish

What “blooms” but is not a flower, is an animal but has no brains, and has tentacles that Medusa’s hair was named after? A jellyfish! Jellyfish larva join together, land on the ocean floor, boat hulls, or sometimes even on floating plankton or fish and latch on with tiny “fingers” called cilia. They turn into a polyp, or a plant-like stalk with a mouth at the top. Polyps look much like anemones which are their cousins. It can take years for the polyp to split and turn into free-floating jellyfish. Each new top layer of the polyp that splits off is said to be budding. The next stage is called the medusa stage, where the jellyfish continues to grow tentacles. It is no wonder Greek mythology used this term to describe the long snake hair coming off the mythical Medusa as the tentacles can move around to grab prey and sting. Jellyfish don’t “bloom” at this stage necessarily. A large group of jellyfish swimming together in a small area is called a “bloom.” It sometimes also depends on how quickly they gather together and if it is a bigger group than scientists expected to see in that area.

As for the lack of brains, jellyfish truly don’t have one! They instead have a complex **nerve net**, a group of nerves that functions without the central unit of a brain to guide it. The nerve net is located in their skin



and transmits impulse signals through a circular nerve ring that runs along the rim of the jellyfish’s bell body. Jellyfish are not “mindless” however. They can detect the tide’s movement and use it to move around while they pull in water and squirt it out behind them. Jellyfish can also detect if the water has the correct amount of salt in it for them to live, and will seek out water with the right concentration. Some jellyfish live in fresh water, but for those that don’t, the **saline**, or salt-to-water concentration, is important to their survival.

Jellyfish are not actually fish. Many aquariums simply call them “jellies.” They are made of 95 percent water! They do have mouths for feeding but only some have an organ that is like eyes. Jellyfish eyes can’t see images; they only record light. This helps these jellyfish know up from down by detecting the sun shining on the water’s surface. Box jellyfish are unique in that they have 24 eyes that can actually see things all the way around their bodies. Box jellyfish have four brains. Box jellyfish are, however, not “true jellyfish” and are classified as relatives to the brainless type. Jellyfish have been around for at least 500 million years! This makes them the oldest living multi-organ animal. How did they survive so long without a brain? Whatever the reasons, they are truly fascinating creatures.

1. **New terms:** See how these three terms are used in the text, and write a definition next to each one.

jellyfish bloom a large group of jellyfish swimming in a small area

nerve net a group of nerves that functions without the central unit of a brain

saline salt-to-water concentration

2. What part of the jellyfish was the Greek mythical creature Medusa named for? the tentacles

3. All jellyfish have four brains.

True or **False?**

4. Jellyfish have great eyesight.

True or **False?**