Kids Ask Dr. Bug

Home to more than plants, kids ask Dr. Tamra Reall about the curious things found in the garden.

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Do bugs live in water?

Aliya, 9

Many insects live in water for part or all of their lives and are called aquatic insects. Examples of aquatics that start out in water but are adults on land include mosquitoes, dragonflies, mayflies, and dobsonflies. Examples of insects that spend their whole life on or in the water are water striders, whirligig beetles, and the aquatic leaf beetle. Because insects don't have gills, they have interesting ways to breath underwater. Some carry a bubble of air, some have long breathing tubes that reach the surface, and some take oxygen from underwater plants.

Why do water bugs have so many legs when they just swim around? Asaria, 6

All adult insects have 6 legs, whether on land or in the water, but that doesn't mean all legs look the same or have the same purpose. Water striders have special legs and "feet" that help them skate around on the water surface without sinking. The hind legs of whirlygig beetles are made for swimming and turning fast—flat with bristles, like flippers. Their front legs are adapted for catching food.

Are dandelions the same as sunflowers? Kharma. 9

Dandelions and sunflowers have a lot of similarities – they're both bright yellow and cheerful! It turns out that they are related. Scientists separate living things into groups such as species, families, and kingdoms. These two flowers are in the same family: Asteraceae. However, they are different species with different lifestyles. Dandelions are close to the ground and sunflowers are bigger -- some can even reach ten feet tall.

How many teeth do spiders have? Lili, 5

Spiders have very different mouthparts than people – they don't have teeth. Instead, spider jaws are called chelicerae with two fangs, one on each tip. The fangs inject venom to paralyze the prey. You may have heard that all spiders turn their food into a liquid before eating, but many shred and mash their prey using their jaws. Some spiders "chew" up and down, but most chelicerae are like scissors and move side to side.

Are mushrooms poisonous?

Brett, 10

Mushrooms are a type of fungus. There are over 5000 mushroom species compared to over 2 million species of fungi. Some mushrooms are poisonous, and some are not. Mushrooms from the grocery store are safe to eat. However, mushrooms in your yard may be poisonous. It's a good idea never to eat mushrooms you find in the wild. Local mushroom experts may be able to identify safe wild mushrooms, but you have to be very careful. Mushrooms are amazing: they can show up overnight, some are very colorful, some smell like rotting meat, some explode, and some glow in the dark. Currently, I'm growing oyster mushrooms in my kitchen from a kit I purchased online. They are delicious with pasta.

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