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# Quest

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INSIDE





# Hidden Creatures

by Michelle Barone

The nearly transparent creature stares at you with a single, unblinking eye. It crunches and expands to move over an object. Gulp! The object disappears. Three other footprint-shaped critters zip wildly in front of you. They frantically try to escape a huge, black monster inching toward them from below. The monster pulls its head in and then stretches forward, searching for something to eat. Are you watching a horror film? Is this a video game? Are you having a nightmare?

You blink and adjust the focus on your microscope. You wonder what is in the murky, pond water. Flatworms, no bigger than an eyelash, crawl up the side of the jar. Orange specs move in the water. With a magnifying glass, you see the specs are daphnia or water fleas. But the world of amoeba, paramecium, and more would be hidden from you without a microscope.

How can you get a microscope? Toy stores sell starter microscopes that magnify from 100 to 600 times for \$9.99. Other microscopes cost from \$15.00 to \$69.99. You might save your allowance money or ask for a microscope for your birthday. You could have your very own microscope for less than most Game Boys or other computer games. Many microscopes don't need batteries and will last for a long time. Your school might let you check out a microscope for the weekend.

Where can you find microorganisms or living things that are too small to see by your eye alone to observe?

Water from the faucet smells fresh and tastes clean because it contains chemicals like



chlorine to kill germs. You won't see microorganisms in drinking water for this reason. You can look at rainwater or melted snow under your microscope. Try collecting some standing water near plants from a pond or ditch. You can also create your own specimen habitat.

Put grass and plants into a jar. Fill it half way with artesian spring water from the store or rainwater. Tap water containing chlorine will kill the organisms in your jar. Loosely cover the jar with cloth so that air can flow through. After two weeks, your jar will smell stinky. It should now contain microorganisms.

For you to see hidden creatures, use an eye dropper to place a drop of water on a glass or plastic slide. Carefully scoot your slide under clips on the platform stage. Face a sunny window or bright light. Aim the mirror directly at the light. Looking into the eyepiece, rotate the mirror until you see the maximum amount of light possible. Then turn the focus knob until the specimen is clear. It takes patience and practice to focus a microscope, but it's worth it. Once you see something magnified 10, 100, or 1,000 times its normal size, you'll be hooked.

Can you find the "one-eyed" amoeba that looks like a transparent, fried egg? Around their bodies, footprint-shaped paramecium have tiny hairs that help them swim. Are there vorticella? They look like wine glasses opening and closing at the top. How about kidney bean-shaped dots called seed shrimp? They also swim, using tiny hairs that surround most of their bodies. Draw everything you see to look up in an encyclopedia or reference book later.

When you want a break from TV, video games, or the computer, focus on your microscope. Add a drop of pond water. It's a live show every time.

