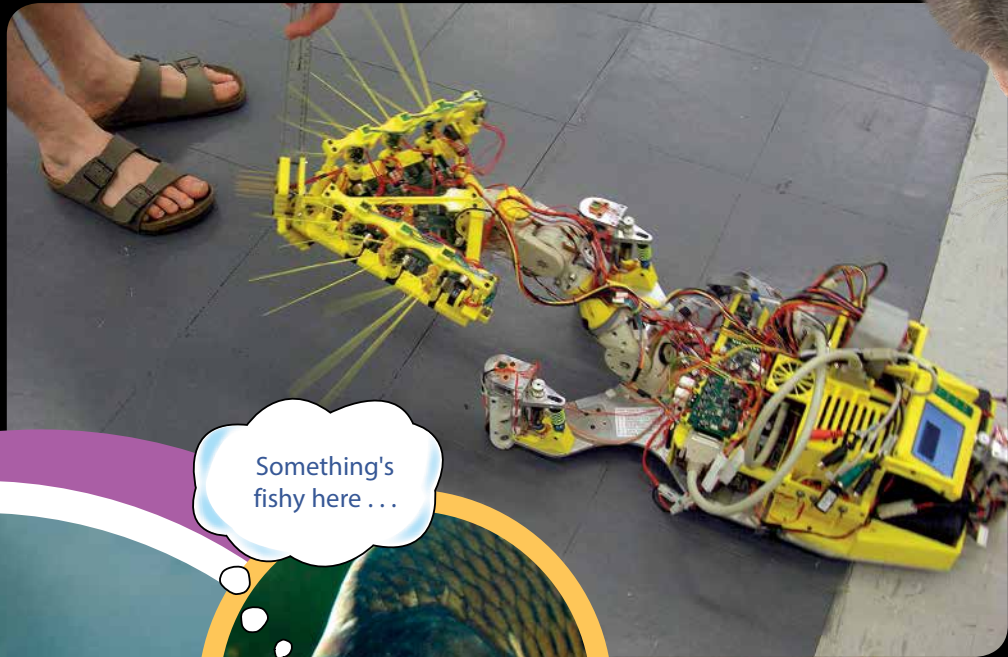
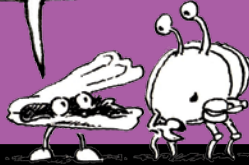


Robotzoo

What if your robot needs to swim through the water, wriggle through sand, or climb trees? As robot makers try to design robots that are able move in different environments, they are studying the way bugs, birds, fish, and reptiles move, and copying some of nature's cleverest design ideas into their bots.

Feeding time just isn't the same with batteries.



Something's fishy here ...



Robot Fish
Pollution-monitoring robot fish will soon be swimming off the coast of Spain. The fish suit is not a disguise—it's just the best possible shape for energy-efficient swimming. When chemical sensors in their chins detect pollution, such as an oil spill, these robot guardians will pinpoint the

Robot Inchworm

Treebot imitates the motion of an inchworm as it climbs up the trunks of trees, first feeling around for the best hold, then using its multiple arms to grab tight in just the right place.



See some of these robots in action at www.askmagkids.com.

I smell a robot!



Robot Rat

Taking its cue from animal whiskers, Scratchbot uses long, sensitive feelers to detect nearby objects and sense motion by the air currents they stir up. Many robots rely on sonar or bouncing lasers to detect

Copycat



Tickle, tickle!

Robot Gecko

What can climb walls better than Spider-Man? A gecko—and now, the gecko-inspired Stickybot. This robot uses a silicon imitation of the fine, clingy hairs on geckos' feet to climb straight up smooth surfaces such as glass. Other climbing robots use pads covered with tiny hooks to

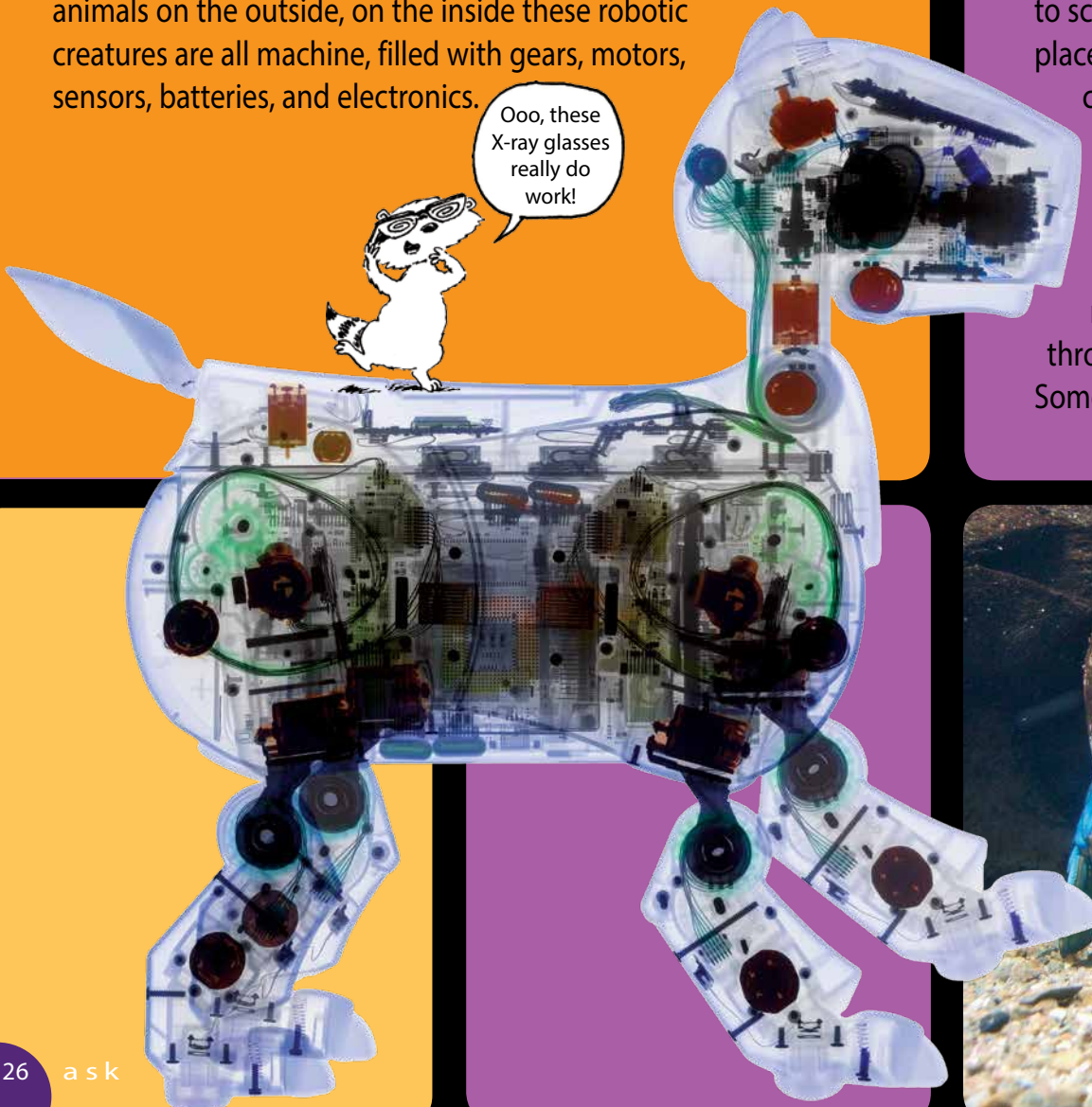


Robot Hummingbird
If you hear a metallic buzzing nearby, it might just be a robot spy. This tiny surveillance bot imitates the flying style of a hummingbird to locate a target and then hover in place while



Robot Dog

What's inside of a robot dog? Though they may look like animals on the outside, on the inside these robotic creatures are all machine, filled with gears, motors, sensors, batteries, and electronics.



Robot Sandfish

Small robots are often used to scout out dangerous places such as mines and collapsed buildings. This robot imitates the sandfish lizard's wedge-shaped head and undulating body motion to "swim" through dirt and rubble. Someday it might even



Robot Snake

This observing robot climbs up trees the easy way—by imitating a snake, rolling around the trunk and gripping fast. On the ground, these rollers let it move quickly, turn, and raise its camera head to check out the terrain. But no hissing, please.



I am NOT a fish!



Robot Lobster

When robot designers wanted to build a robot that could keep its footing on rocky seafloors and river bottoms, they modeled it on the sure-footed lobster. Sensors instead of claws let RoboLobster



At last! My very own robot!

