Context Clues

In the busy rain forest of Malaysia, a grasshopper leaps into a spray of orchids. Suddenly, one of the "flowers" turns on the grasshopper. An orchid mantis, with wings like petals, grips it tightly. For the grasshopper, there will be no escape.

The orchid mantis is a master of camouflage—the art of hiding while in plain sight. Camouflage enables predators like the orchid mantis to hide while they lie in wait for their prey. For other animals, camouflage is a method of protection from their enemies.

Animals blend into the background in several ways. Their colors and patterns may match their surroundings. The shape of their bodies may resemble some other object, such as a stick, a leaf, or a flower. Crests and frills may break up the outline of their bodies, disguising their real shape and fooling the eye. They may even behave like something else—a fluttering leaf or a dangerous animal, for example.

Some animals use their skin alone for concealment. The skin of the red-eyed tree frog is the universal green of the rain forest. Others use both color and pattern. The comet moth matches the colors and

patterns of the drying leaves of the undergrowth.

The Kenyan sand boa snuggles into the ground and depends on its coloration and pattern to hide as it pokes its head out from among a pile of stones.

Sand dabs use the same technique underwater. These fish settle on the sand and flutter their fins to partially bury themselves. Soon only a faint fish "shadow" remains.

Brightly colored animals can be masters of camouflage. Scorpionfish, warbonnets, and other tropical fish look shocking in open water, but when swimming in the reef, they match the vivid tints of the coral. As well as being camouflaged by their colors, these fish are also hidden by their complicated shapes: with their jagged outlines and frilled fins, they look "unfishlike" among the coral branches. When a predator looks for a fish shape, its eyes detect only bits and pieces.

The striped hawkfish has bright bands of color that break up its outline and fool predators in a similar way. This technique is called "disruptive coloration."

Zebras also benefit from disruptive coloration. Although they are easy to see on

the grasslands at noon, at dawn and dusk their stripes make them harder to see. Since lions and other predators prefer to hunt in low light, the pattern helps the zebra survive.

Chameleons are famous for their ability to change color. However, they don't change color in order to match their surroundings. Their usual color matches the place they live; they *change* color to communicate with other chameleons.

When they change color, they become more noticeable, not less.

Chameleons combine many camouflage techniques. Their flat, oval shape resembles a leaf, and many species

grow crests along the edges of the oval to hide their chameleon shape. They spend most of the day motionless except for swiveling their eyes to look for food. But when they do walk or climb, they rock back and forth so their movements seem as random as those of a leaf in the breeze.

The most dangerous time of any animal's life is babyhood, and baby animals have some of the most effective camouflage. The mottled pattern of a fawn (a young deer) makes it hard for predators to see. Baby chameleons wear the color of tree bark—dull browns and grays—turning leaf green only when they are large enough to mimic a leaf.

Context Clues

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| DEFINITION: | | | |
| 36 | 1 | camouflage | |
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| 36 | 1 | disguising | |
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| 36 | 2 | disruptive coloration | |
| DEFINITION: | | | |
| 37 | 2 | fawn | |
| DEFINITION: | | | |
| 37 | 2 | color of tree bark | |
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| 37 | 2 | mimic | |
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