

A Calculating Turtle Tale

Objective

The student will calculate several equations to complete a story about sea turtles.

Materials

- A **Calculating Turtle Tale** funsheet
- calculator
- pencil

Background

Like other turtles, sea turtles lay eggs. Many female turtles return to and nest on the very beach where they were born. Since their nesting grounds are usually far from their feeding grounds, sea turtles migrate long distances. Green sea turtles migrate almost 2,414 km (1,500 miles) from nesting to feeding grounds. Leatherbacks have the longest migration of all sea turtles. They have been found more than 4,828 km (3,000 miles) from their nesting beaches! Although both male and female turtles make the journey to nesting beaches, the males remain in the water, waiting to mate with the females after they have laid their eggs. After he hatches, a male sea turtle never goes ashore again. A female turtle comes ashore at night, and uses her flippers to scoop out a nest in the sand above the high tide line. Into this nest, she deposits a clutch of 80 to 100 eggs the size and shape of pingpong balls, then covers the eggs with sand before returning to sea. She may repeat this process up to nine times in one breeding season, and may nest every two to three years.

Temperatures inside nests may determine whether male or female turtles hatch from eggs. Lower nest temperatures produce males; higher temperatures produce females. After 45 to 70 days buried beneath the sand, the young turtles break out of their eggs using a temporary egg tooth, or caruncle. The hatchlings may take three to seven days to dig their way to the surface. They usually wait until night to emerge from the nest. Hatchlings head toward the sea in groups. Some are snatched by predators like dogs, birds, and raccoons before they ever reach the water. Bright city and street lights confuse young turtles trying to find the surf. Many actually head away from the ocean and toward parking lots. These animals may be eaten by predators or crushed by cars. When a hatchling reaches the ocean surf, it dives into a wave and rides the undertow out to sea.

Action

PART ONE:

1. Distribute **A Calculating Turtle Tale** funsheet to students.
2. Students use calculators to solve each equation. Turn calculators upside down to read the words formed by answers. (Remind students to complete operations within parentheses first.)
3. Write the words above equations to read the story.

A Calculating Turtle Tale

Instructions

Use a calculator to find the answer to each equation. Turn your calculator upside down to read the word formed by your answer. Write the correct word above each equation to read the story. Remember, always complete operations within parentheses first.

On a moonless night, a female sea turtle crawls out of the surf and heads up the beach. She stops at a spot just past where the waves wash up with the highest tide, and begins to dig a deep $(1,852 \times 2)$ _____ in the sand. All around her, other female turtles are busy with $(6,713 \times 2) \times 4$ _____ of their own. Each female lays 80 to 100 round eggs in her nest, then covers the hole with sand. In a few months, the young turtles hatch.

The hatchlings climb up through the sand at night and head for the sea. They find their way to the water by following the light of the moon and stars. Sometimes, bright lights from buildings and street lights confuse hatchlings, and they $(1,500 \times 2) + (50 \times 10) + 7$ _____ their way. Without the safety of the sea, the young turtles can't survive.

Sea turtle survival is threatened in other ways, too. Even though it $50 + 17 - 8 - 8$ _____ against the law in the United States and many other countries, sea turtles are still hunted by some people for the meat and $62,705 \times 9.20732$ _____. The shells are used to make combs, eyeglass frames, and trinkets. Turtle eggs are sometimes taken from nests $23 \times 37 \times 63 + 91$ _____ and eaten. Not long ago, turtle $(228.5 \times 2) + 253$ _____ was prized as a skin moisturizer.

Habitat, an animal's home, is one of the most important part in its survival success. A clean ocean and safe nesting beaches are important to sea turtles. Unfortunately, as more people put up buildings on beaches, sea turtles wind up with fewer places to nest, which could mean $(1,100 \times 5) + (4 \times 9) + 1$ _____ sea turtles in the future.