

GO TO SLEEP, GECKO!

Second Grade

Outcome:

Students will learn about ecology, how organisms are dependent on one another, and how animals are interconnected.

Materials:

Blackboard or Whiteboard

Map or globe

Paper, pencil

Cup, spoon, plastic lids from margarine tubs, white glue, blue food coloring, paper clips, scissors, brown permanent marker

Computer with Internet

Optional: How and Why Stories: World Tales Kids Can Read and Tell (Martha Hamilton and Mitch Weiss, August House 1999)

Wisdom Tales from Around the World (Heather Forest, August House 1996)

INSTRUCTIONAL PLAN

Introductory Activity:

Teacher asks students the definition of a food chain.

Teacher explains and illustrates on blackboard:

- All living creatures need to get energy to live.
- A food chain is a sequence of who eats whom or what to obtain nutrition in an ecosystem.
- The chain starts with a primary energy source such as the sun.
- The next link in the food chain is an organism that can make its own food from the energy source, such as plants.
- The next link is an organism that eats the previous link, such as a rabbit eating grass. These animals are herbivores.
- The next link in the food chain is animals that eat herbivores. They are carnivores (meat eaters) such as a snake eating a rabbit.
- A higher animal in the chain, such as an owl then eats the snake.
- The chain continues with a hawk eating an owl.
- The chain ends with an animal with no natural predators such as a hawk, alligator, or polar bear.
- Some animals have different positions in the food chain as they have a varied diet.
 - A bear may eat berries on a plant or he may eat salmon.
 - How do humans fit into the food chain?
- There are many food chains within an ecosystem and they form a food web.
- The animals in an ecosystem are dependent on each other. Although there is competition between animals for food, there is also interdependence.

If one species becomes extinct, (dies out), it can affect the entire food chain.

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Teacher Reading of Story:

Teacher informs students that they will be reading a story from Bali, (show on map or globe) which shows an ecosystem being interconnected in a different way. Teacher asks students to make a time line of story events while the story is being read.

Comprehension:

- What is the setting for this story?
- Who are the main characters?
- What is the conflict or problem?
- Why did Gecko think Elephant should help him?
- Name the sequence of events and conversations that Elephant had with Gecko and the other characters.
- What did Elephant tell the fireflies, Buffalo, and Rain?
- How was the conflict resolved?

Interpretation:

- How did Gecko feel when he couldn't sleep?
- How did Elephant feel about being awakened in the middle of the night?
- How did Elephant's feelings about being awakened change as the story progressed? (Clues in illustrations)
- How are all of the story events interconnected?
- Did Elephant give a good answer to Gecko by saying, "Some things you just have to put up with"?
- What would you have told Gecko if you were the village boss?
- Why was Gecko finally able to sleep?
- What lesson does this story teach?
- Give examples of other ways the world is connected.

Follow Up Activities:

- Food Chain Follow Up

Materials: pencil and paper

Place these animals in order to create a food chain:

- raccoon, algae, dragonfly, mosquito larva
- seal, white shark, plankton, fish

Use the Internet or library to research and create other food chains. Which food chains have humans as the final consumer?

- Character Education

This folktale highlights the character values of caring, citizenship, fairness, respect, and responsibility. Students choose one of these words to look up in the dictionary and illustrate. Students show the illustrations to classmates and have them guess which value is illustrated.

- Drama

Teacher divides students into small groups. Each group creates a new ending for the story and creates a skit to present to the class. Group shares why they chose their particular ending.

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Follow Up Activities cont.:

- Math

Materials: paper, pencil

The Balinese people consider the Tokay species of gecko, the type of gecko in the story, to be good luck. These geckos live in many homes, crawling up the walls and ceilings, and lurking under the rafters in the roof. There are hundreds of species of geckos that make a large variety of sounds, but the Tokay species makes clicking noises that sound like the word, gecko. Balinese people count the number of sounds this gecko makes. They think that the higher the number, the greater luck a household possesses. It is even luckier to have an odd number of sounds.

Directions:

1. Students number their paper from 1 to 10.
2. Teacher makes a series of gecko sounds and students count them.
3. Students record the number and write odd or even next to it.
4. Students re-number their papers and they are given a chance to be the “gecko”. Each student makes the gecko sounds while classmates record the number and determine if the number of sounds is odd or even.

- Science

Compare and Contrast the weather in Bali with your state.

Make a graph to display the weather information from Bali.

Research the same information about your state.

Compare and contrast the results.

Based on this information, does the story take place during the wet season or dry season?

Are the monthly temperature differences more varied where you live?

How does the rainfall pattern compare?

What month would you most/least like to visit Bali?

Bali is located 8 degrees south of the equator and has a tropical climate. (Show on map or globe.) Bali does not have 4 seasons. It has only a wet season from September through February and a dry season the other half of the year.

<u>Month</u>	<u>High Temp</u>	<u>Low Temp</u>	<u>Average Rainfall</u>
January	86	78	13.70 inches
February	86	78	11.30 inches
March	87	78	8.40 inches
April	87	78	3.70 inches
May	86	78	3.00 inches
June	85	77	2.80 inches
July	83	76	2.00 inches
August	83	76	0.90 inches
September	85	76	1.60 inches
October	86	77	3.60 inches
November	87	78	6.10 inches
December	86	78	11.50 inches

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Extensions:

- Many Balinese folktales were created at a time when the Island's people did not know all of the scientific information that we know today. They made up stories in an attempt to explain why things they did not understand. These are called **pourquoi** stories. Pourquoi means *why* in French. What natural phenomena does Go to Sleep, Gecko! explain? More pourquoi tales can be found in How and Why Stories: World Tales Kids Can Read and Tell (Martha Hamilton and Mitch Weiss, August House 1999).

Read "Little Lizard's Sorrow" a folktale from Vietnam that explains why the gecko makes the sounds that it makes. It can be found on page 106 in Wisdom Tales from Around the World (Heather Forest, August House 1996).

- Ecology

The weather and natural events in the world are interconnected. Research how a volcano, earthquake, or other natural phenomena in one country can affect other countries.

- Make an Earth Light Catcher

Materials: cup, spoon, plastic lids from margarine tubs, white glue, blue food coloring, paper clips, scissors, brown permanent marker

Directions:

1. Pour about 1/3 cup of glue into a cup and add 4-5 drops of blue food color.
2. Fill the plastic lid with the colored glue. Place a paper clip in the glue (to be used as a hanger) with 1/2 of it extending past the circle. This will define the top of the light catcher) Allow the glue to completely dry for several days.
3. Peel the glue circle out of the lid.
4. Use a globe or map to find continents to draw in the circle. Students should vary which continents they draw so that there is a variety represented in the class.
5. Students should practice on a paper and then use the brown marker to draw their continents or landforms on the blue circle.
6. Tie a piece of string or yarn through the paper clip and hang in a sunny window.

- Internet Search

Go to: www.omniglot.com to learn about the Balinese alphabet. Explore writing words using this alphabet.

- Batik fabrics are very popular in Bali. To make batik, place wax on a cloth in a particular pattern. Then dye this cloth. The areas with wax resist the dye. After cloth dries, remove wax. Research the process of making batik fabrics and create a batik cloth.