**Concepts**
Three different types of sea turtle can be found on Hawaii’s sandy shores. Each one has unique physical characteristics that can be used to distinguish them from one another.

**HCPS III Benchmarks**
- SC 2.1.1
- SC 2.1.2
- SC 2.3.1
- SC 2.5.1

**Duration**
1 hour

**Source Material**
- Maui Ocean Center
- PRISM

**Vocabulary**
- Reptiles
- Adapted
- Scutes
- Endangered
- Threatened
- Poaching
- Marine debris
- Honu
- Limu

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**Hawaii’s Sea Turtle Observer**

**Summary**
Students make observations and identify the seven different types of sea turtles in the world. They will also learn the name of and how to identify the three types of sea turtle that can be found in Hawaii.

**Objectives**
- Students will observe pictures of sea turtles of the world and of Hawaii and record their observations on a datasheets
- Students will form questions about turtles based on their observations
- Students will be able to identify the parts of a sea turtle and their function

**Materials**
- Hawaii Sea Turtle Observation Cards
- Background on Types of Turtles and Parts of a Turtle
- Sea Turtles of the World Poster (see additional file)
- Who Am I? Riddle Clouds & Worksheet
- K-W-L Worksheet
- Sea Turtle Observer Worksheets

**Making Connections**
Students may recall personal experiences when they have seen sea turtles on Hawaii’s sandy shores. Learning about the three different types of sea turtles that can be found in Hawaii will help students appreciate their importance to the sandy shore habitat.

**Teacher Prep for Activity**
Set up five work stations: 1 for each of the four turtle ID cards, 1 with turtle poster and riddle cards. Copy 1 of the K-W-L chart, turtle observer, and who am I worksheets for each student. Each student should receive a packet with three worksheets total.

**Background**
Sea turtles are air breathing **reptiles**. Reptiles have a backbone, scaly skin, claws on their toes, and lay eggs. Sea turtles spend most of their life in the ocean and are very well **adapted** for life in the water. They have four flippers that are used for movement. They use the two front flippers to help them swim. The two back flippers are like rudders and help them steer or move in the direction they want to go. Their skin is protected by scales. The shell on their back is formed by many bony plates called **scutes** that are fused together. There are seven kinds of sea turtle in the world that we know about. All sea
turtles are **endangered** or **threatened** because they have to deal with a lot of threats. Some of these threats are human disturbance, **poaching**, **habitat** destruction, and **marine debris**. We have only three species of sea turtle in Hawaii. They are the Green, Hawksbill, and the Leatherback. The one we see the most is the Green sea turtle. The Hawaiian name for the Green sea turtle is “**honu**.” The honu can weigh up to 400 pounds and be 43 inches long. It likes to eat a kind of green algae called **limu** that grows on coral reefs. This means that it is a vegetarian and eats only green food. The honu has green fat on the inside from the green algae it eats. That is why it got the name Green sea turtle.

**Procedure**

1. Give each student a K-W-L chart and work with them, making a larger chart on the board or on chart paper, to complete the K & W portions. When finished collect the worksheets and keep them all together in a safe place. You will need them at the end of the turtle lessons to have the students complete the L portion. (~10 minutes)
2. Read the background information aloud to the students and discuss new vocabulary words as needed. (~5 minutes)
3. Separate the students into five groups - one group per station. Pass out the sea turtle observer worksheets. While you are passing out the worksheets, briefly explain what they will be doing at each of the five stations. At stations 1-3 they are recording the name of the type of sea turtle from the card and making observations about what it looks like, what type of habitat they are found in, and other interesting things on the cards. At station 4, they will be observing the pictures on the card and recording what they see and how they feel about the pictures. At station five they will be working as a group to solve the riddles for each of the seven sea turtles found in the world.
4. Ask students to make observations as a group and record observations on their individual worksheets at each station
   (HINT: If students have a difficult time making observations, ask helpful probing questions to guide them. For example, *what is the sea turtle doing in the picture?*)
5. Rotate the groups through each of the five stations. Repeat step #4 at each station.
   (HINT: the “Who am I” activity will most likely take the longest to complete. Use the time it takes for the first group to complete the worksheet as a guideline for switching stations.) (Steps 3-5 ~30 minutes)
6. Once each group visits all five stations, students should return to their desks and silently review their recorded observations. Collect the completed worksheets.
7. To end the session, put the sea turtles of the world poster up on the board and work through each riddle and answer with the students. There is a hint to figuring out each answer within the clue – help the students identify the helpful hints and discuss how they used those hint to figure out the answers. (~5 minutes)

**Assessments**

Questions Formulated
Worksheets Completed

**Resources**

www.chirpingbird.com
http://www.stemnet.nf.ca/CITE/sea_turtles.htm
Literature Connections
Turtles by Jodi Huelin
Baby Honu’s Incredible Adventure by Tammy Yee

The two books above are both excellent and highlight important aspects in the life of sea turtles, specifically Hawaiian green sea turtles. The students will be learning about the anatomy and life cycle of the Hawaiian green sea turtle in the next two or three sessions. Reading these books aloud to the students will help introduce the information that will be covered in the next 2-3 sessions. The books will provide a secondary source of information on the Hawaiian green sea turtle for the students and reinforce the key concepts within their science lessons.
NAME: __________________

**Sea Turtles K-W-L Chart**

<table>
<thead>
<tr>
<th>What I Know About Sea Turtles</th>
<th>What I Want To Know About Sea Turtles</th>
<th>What I Learned About Sea Turtles</th>
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STUDENT NAME: ________________

Sea Turtle Observer Datasheet

Record your observations for each turtle below

Station 1: Name of Turtle__________________________
Your observations

Station 2: Name of Turtle__________________________
Your observations
Station 3: Name of Turtle__________________________
Your observations

Station 4: What do you see and what do you think about these pictures?
STUDENT NAME: ____________

“Who am I?” Datasheet

Turtle #1:
Name of Turtle ____________________________
How did you find out?

Turtle #2:
Name of Turtle ____________________________
How did you find out?

Turtle #3:
Name of Turtle ____________________________
How did you find out?
Turtle #4:
Name of Turtle _________________________
How did you find out?

Turtle #5:
Name of Turtle _________________________
How did you find out?
Turtle #6:
Name of Turtle ________________________________
How did you find out?

Turtle #7:
Name of Turtle ________________________________
How did you find out?
RIDDLE CARD

I am the most secretive of all the sea turtles in the world! Scientists know very little about me!

FLATBACK
RIDDLE CARD

I am the largest of all the sea turtles! I am also the largest reptile on Earth by weight! I weight 1400-1600 pounds! My shell is 6-7 feet long! My shell is not hard like other sea turtles! It is like hard rubber! I love cold water, to swim far, and dive deep! My favorite food is jellyfish!

LEATHERBACK

Hawaii’s Sea Turtle Observer
RIDDLE CARD

My mouth looks like a bird beak! I can weigh 100-200 pounds! My shell is 30-36 inches long! I have the prettiest shell of all the sea turtles! You can see me in Hawaii!

HAWKSBILL

I am the smallest sea turtle! I weigh only 80-120 pounds! My shell is only 26-30 inches! My scutes or the shiny plates that make up my shell are olive gray color! My favorite food is crabs I dig out of the sand!

KEMP-RIDLEY

RIDDLE CARD

I have some green in my shell, but am not as green as my name says! I am the largest hard shelled turtle! My shell is 36-43 inches long! I can weigh 400 pounds! Maybe I got the name green because I eat green food! I am a vegetarian! You can see me on the sandy shores in Hawaii!

GREEN


Hawaii’s Sea Turtle Observer
RIDDLE CARD

My head is as big as a log! I weigh 150-400 pounds and my shell is 33-40 inches long! My favorite foods are jellyfish and crabs! My colors are red and brown!

LOGGERHEAD


Hawaii’s Sea Turtle Observer
RIDDLE CARD

Sometimes my shell is olive green, but it can be black or grayish brown! My shell is 24-30 inches long! I only weigh around 100 pounds! My favorite foods are crabs, shrimp, rock lobsters, and jellyfish!

OLIVE RIDLEY

Hawksbill Turtle
Leatherback Turtle
Green Sea Turtle

Hawaii’s Sea Turtle Observer
Sea Turtles of the World

- Green
- Flatback
- Loggerhead
- Hawksbill
- Olive Ridley
- Kemp Ridley
- Leatherback