Nat Geo Certification Lesson Template

Please Note: This lesson plan should be your own work and written in your own words with sources cited. You are encouraged to take inspiration from sources such as Nat Geo or Alliance resources, but you are expected to build upon them to create your own unique plan.

YOUR NAME: Jennifer Burgin, NBCT

LESSON TITLE: Turtles and Tortoises - Animals in our Classroom and in Galápagos

RECOMMENDED GRADES: K-2

TIME NEEDED: Eight to ten 30 minute sessions over a two week period

OBJECTIVES:
Students will:
● Investigate and understand that change occurs over time and rates may be fast or slow (Virginia Standard of Learning K.10).
  ○ As an example of change, we observed differences between turtles and tortoises, including classroom examples (class pet turtles).

MATERIALS:
What materials will need to be gathered or prepared for this lesson?
● Research materials about turtles and tortoises
  ○ I chose a variety of research materials such as books from my public library, school library, online library (my school district has a subscription to www.PebbleGo.com) and online videos from www.thekidshouldseethis.com.
  ○ “These Crazy Cute Baby Turtles Want Their Lake Back”
  http://thekidshouldseethis.com/post/these-crazy-cute-baby-turtles-want-their-lake-back-deep-look
  ○ “Tagging Tiny Turtle Hatchlings”
● A medium for note-taking; I chose a SmartBoard Notebook I could constantly update and add to. One could also use chart paper!
● A small set of student computers or iPads; I had 5 classroom iPads to use, which I felt worked best for younger learners. This will be to use with a Google Maps page.
● This Tortoise Path Google Maps link (I changed it to www.tinyurl.com/tortoisepath) https://www.google.com/help/maps/education/streetview/alcedo.html
● Half a sheet of white drawing paper
● Drawing materials
● Handwriting Paper; choose what is best for your learners

PREPARATION:
What should be prepared in advance?
● Pre-cut the white drawing paper into halves
● Set out drawing tools on the day that you illustrate
● Pre-load the videos before use and ensure that your school platform will not block the video
● Check out books on turtles and tortoises from your local/school library
• Ask colleagues about resources your school offers for research; this is how I found out about our www.PebbleGo.com subscription from our librarian.

DIRECTIONS:
How does the lesson work, step by step?

One should know that I have a 30-35 minute block for content at the end of each school day for my Kindergarten learners. We alternate Social Studies and Science Standards. I taught this unit during a Science standard theme of change. Since I had already taught a unit on changes in weather, my learners were familiar with the topic of change. If your learners are not familiar with discussing change, you may want to add a preview lesson just naming things they know change over time (slowly or quickly).

Here are my steps:

1. For the first week, my learners and I established all we knew and learned about turtles. We started with a blank web on a SmartBoard document that said “turtles” in the center and nothing else. We added our thoughts to the web. After each type of research we did on turtles, we added what we learned. The web became thick with our “knowings” of turtles.
   a. Monday - read a book about turtles and add what we learned.
   b. Tuesday - read an article on www.PebbleGo.com about turtles and add what we learned.
   c. Wednesday - watch a www.thekidshouldseethis.com video about turtles and add what we learned (on this day we realized some turtles are sea turtles with flippers and do not often go on land).
   d. Thursday - watch another www.thekidshouldseethis.com video about turtles and add what we learned.
   e. Friday - read a book about tortoises and compare what we know about turtles to tortoises to the chart.
      i. This was also the day we pretended to be tortoises and acted out “stumpy feet” and “domed shells” and “necks stretching for plants” around the room! So fun! They randomly began to chant “foooooood fooooood” without prompting!

2. The second week was spent differentiating between types of turtles (for us, we noticed turtles and sea turtles) as well as tortoises.
   a. Monday - we created a list of attributes that turtles have and tortoises have. Then we practiced telling the difference by looking at photos of both from books and online.
   b. Tuesday - each learner chose one animal (turtle, tortoise or sea turtle) to focus on for their independent work and illustrated that animal.
      i. Here I put up our notes and referred them back to what they learned, especially that tortoises have thick stumpy feet, sea turtles have flippers, and turtles have webbed toes.
   c. Wednesday through Friday - Turtle and Tortoise Stations: While half of the class continued to work on their illustration and began to write about their chosen animal (turtle, sea turtle or tortoise), and other half of the class used the class iPads to view https://www.google.com/help/maps/education/streetview/alcedo.html - walking the path of the giant Galapagos Tortoise. We had the opportunity to observe turtles from our classroom pets, but we had not had the opportunity
to observe tortoises. This site helped us see tortoises in their natural habitat and explore the ways these animals met their needs.

3. Classroom Exhibition - once our work had been completed, learner illustrations and writings were exhibited for other learners to experience.

MODIFICATIONS:
Suggest ways in which the lesson might be modified for specific student audiences, different abilities, etc.

My learners all benefited from continual review of our notes. Because the notes were taken with their words and their learning, it was very meaningful. We also used this later to correctly spell words for our writing.

Upon reflection, I may have flipped when I used the Google Maps walk with the giant Galapagos tortoise to earlier; I would also like to find one that includes sea turtles in the water.

EXTENSIONS:
How might you extend this lesson to enhance the learning?

My learners loved learning about the animals of the Galapagos. One of the books we read during this unit was *We’re Sailing to Galapagos: A Week in the Pacific* by Laurie Krebs. I could have created several smaller units of study where we compare a local bird to a Galapagos bird (likely the blue footed booby...the learners loved it), a local lizard to a Galapagos lizard, and so on. However, the “deep dive” we took with turtles and tortoises was extremely enjoyable for all of us.

A link to the book I mentioned in here: https://www.goodreads.com/book/show/2533814.We_re_Sailing_to_Galapagos

LEARNING FRAMEWORK:
How does this lesson connect with the attitudes, skills, and knowledge areas of the Learning Framework?

Attitudes: My learners are **curious** about how the world works; understanding that animals change over time (long and short periods of time) helps learners see that nature changes.

Skills: My learners **communicate** their ideas effectively and can defend their ideas; being able to describe what they learned empowers learners to speak up and be brave.

Knowledge Areas: My learners experience **our changing planet** as well as **wildlife and wild places** in this experience; they understand that the differences between turtles, sea turtles and tortoises enable these animals to thrive and meet their needs.

VOCABULARY:
What new vocabulary will students need to learn to complete this lesson?
- Change
- Turtle
- Sea Turtle
• Tortoise
• Shell
• Feet - webbed toes, flippers, stumpy feet

**ASSESSMENT:**
How will students be assessed for this lesson?

The illustrations and writings will be used to assessed student understanding. I also used equity sticks throughout the research process to ensure that all learners had an opportunity to share at least one thing they learned to our SmartBoard Notebook document where we collected our notes.

**RESOURCES:**
What outside materials did I use to support this lesson? Please include links.

• See Materials Section of Lesson Plan