## **Rutherford County Schools – Individual Learning Modules**

Grade	Course
8 <sup>th</sup> Grade	Science
Unit Focus	

- -Develop a model (e.g. timeline) of the past five mass extinctions.
- -Compare natural extinction rates with the elevated extinction rates of today.
- -Create a model (e.g. concept map) to describe the causes and consequences of a modern extinction.
- -Develop an argument that supports the claim that humans may be responsible for the sixth extinction event.

# Week of 5/4 – 5/8 Standard(s)

8.ESS2.1 Analyze and interpret data to support the assertion that rapid or gradual geographic changes lead to drastic population changes and extinction events.

## Online & Paper Resource(s)

There is no student handout this week!

#### Day 1 - Monday

**Phenomenon:** Five mass extinction events have occurred on Earth since life began. Experts believe that humans will be responsible for the sixth extinction event.

- Watch "Mass extinction events".
- Make observations and ask questions.
- Make a list of species you believe to be extinct or endangered.
- -Choose one species from your list and describe how the animal was adapted to the habitat in which it lived and what might have caused its extinction.
- -If you chose an endangered species, describe how the animal is adapted to the habitat in which it lives and why there is now the threat that it may become extinct.
- 1. Use the online resources linked below to discover data regarding prior mass extinctions on Earth and create a timeline of extinctions that includes the past five mass extinctions, giving details about each mass extinction.
  - Discover Magazine: The Five Mass Extinctions That Have Swept Our Planet
  - National Geographic: Mass Extinctions
  - BBC Science Focus: The five mass extinction events
  - Extinction Over Earth's History
  - Berkeley Extinction Graph

**Optional:** Click Here to open a website that will allow you to make a digital timeline!

## Day 2 - Tuesday

- 2. Write a list of possible current factors that may contribute to species extinction and sort the factors into two categories: 1) natural and 2) human influences.
- 3. Watch <u>"Vanishing species"</u>. Compare natural extinction rates with the elevated extinction rates of today. Over the next 100 years, how many of our species could we lose?
  - Describe five kinds of human activities that result in species extinctions.

(This would be a great day to complete the Observational Task!)

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## Day 3/4 – Wednesday/Thursday (split however you see fit)

- 4. Case Study: (1) Select a species that has gone extinct in modern times using the linked resources below.
  - (2) Create a model (e.g. concept map) to describe the causes and consequences of the extinction.
    - -Include the following key data: species names, illustrations or photos, dates of discovery and extinction, biogeographical data (location, initial population size, ecology, and behavior), causes of extinction, and possible actions that may have prevented the extinction.
  - One Kind Planet: Top 10 Extinct Animals
  - 20 Extinct Animals We've Lost in the Past 150 years
  - The IUCN Red List of Threatened Species

**Optional:** For more information on concept maps or an option to create a digital one click here

#### Day 5 - Friday

5. Develop an argument that supports the claim that humans may be responsible for the sixth extinction event.

## **Observational Task(s)**

Think about factors currently that can contribute to extinction. Which of these factors do you see going on in the area where you live?

- -Make a list of the contributing factors in your area and develop a way to stop or change these things from happening.
- -Create a presentation that would educate local citizens of humans being responsible for the sixth extinction and how we can stop this extinction from happening.

## **Expected Outcomes**

Click Here to open a parent guide.