Name:
Class:
Date:

Topic/Objective:

Essential Question:

Questions:

**Trophic Levels**

* Each \_\_\_\_\_\_ in a food \_\_\_\_\_\_\_\_is known as a \_\_\_\_\_\_\_\_\_ level.
* Trophic levels \_\_\_\_\_\_\_\_\_\_\_ a feeding \_\_\_\_\_\_ in the \_\_\_\_\_\_\_\_\_ of \_\_\_\_\_\_\_\_\_ and matter in an ecosystem.

**\_\_\_\_\_\_\_\_\_\_\_\_**- the \_\_\_\_\_\_\_\_\_ of \_\_\_\_\_\_\_\_\_\_ matter comprising a group of organisms in a habitat.

* As you move \_\_\_ a food chain, both available \_\_\_\_\_\_\_\_\_ & \_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_.
* \_\_\_\_\_\_\_\_\_ is transferred upwards but is \_\_\_\_\_\_\_\_\_\_\_\_\_ with each transfer.



**\_\_\_\_\_\_\_\_ chain**- \_\_\_\_\_\_\_\_\_\_ model that shows how matter and \_\_\_\_\_\_\_\_\_\_ move through an ecosystem

Draw a sample food chain that you might see in Virginia (**in the space below)**: include a producer, a primary consumer, a secondary consumer, and a tertiary consumer

Summary:

Questions:

**Food \_\_\_\_\_\_**- shows \_\_\_\_ possible feeding \_\_\_\_\_\_\_\_\_\_\_\_\_\_ in a community at each \_\_\_\_\_\_\_\_\_ level

* Represents a \_\_\_\_\_\_\_\_\_\_\_\_ of interconnected food \_\_\_\_\_\_\_\_\_

**Food chain-** just \_\_\_ path of energy

**Food web-** \_\_\_\_ possible energy paths

**Nutrient Cycles**

Cycling maintains \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (balance) in the environment.

* \_\_\_ cycles to investigate:

1. \_\_\_\_\_\_\_\_ cycle

2. \_\_\_\_\_\_\_\_\_ cycle

3. \_\_\_\_\_\_\_\_\_\_\_\_\_ cycle

**\_\_\_\_\_\_\_\_ cycle-** evaporation, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, condensation, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**\_\_\_\_\_\_\_\_\_ cycle-** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_ cycle carbon and \_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_-through the environment.

**\_\_\_\_\_\_\_\_\_\_\_ cycle-**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ nitrogen (N2) makes up nearly \_\_\_ %-\_\_\_ % of air.

Organisms \_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_ use it in that form.

\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_ convert nitrogen into \_\_\_\_\_\_\_\_\_\_\_ forms.

Only in certain \_\_\_\_\_\_\_\_\_\_\_\_ and industrial \_\_\_\_\_\_\_\_\_\_\_\_\_\_ can \_\_\_\_\_\_\_ nitrogen.

**Nitrogen\_\_\_\_\_\_\_\_\_\_\_\_\_\_** - \_\_\_\_\_\_\_\_\_\_atmospheric nitrogen (N2) into \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(NH4+) which can be \_\_\_\_\_\_\_\_\_\_ to make organic compounds like\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_.

**Nitrogen-fixing\_\_\_\_\_\_\_\_\_\_\_\_\_:** Some live in a \_\_\_\_\_\_\_\_\_\_\_\_\_\_ relationship with plants of the \_\_\_\_\_\_\_\_\_\_\_\_family (e.g., soybeans, clover,\_\_\_\_\_\_\_\_\_\_\_\_).

* Some \_\_\_\_\_\_\_\_\_\_\_\_-fixing bacteria live \_\_\_\_\_\_\_ in the\_\_\_\_\_\_\_.

Summary:

Questions:

* Nitrogen-fixing \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_are essential to maintaining the fertility of semi-\_\_\_\_\_\_\_\_\_\_ environments like \_\_\_\_\_\_ paddies.

**\_\_\_\_\_\_\_\_\_\_ in food chains-**

While energy \_\_\_\_\_\_\_\_\_\_\_\_ as it moves up the food chain, \_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_ in potency.

* This is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Ex: \_\_\_\_\_\_ & Bald \_\_\_\_\_\_\_\_\_\_\_

Summary: