**Biodiversity Fill-In-Notes NAME\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Biodiversity** is:

--the **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** of organisms in a given area

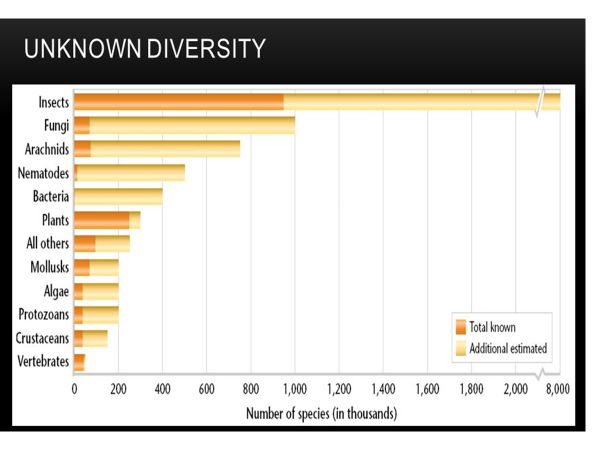
--the **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** within a population

--the variety of **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** in a community

--the variety of **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** in an ecosystem.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** on Earth and the **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.**

* Scientists have identified appx \_\_\_\_\_\_\_\_\_\_\_\_ species on Earth --- Est \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ more remain unknown
* The tremendous variety of life on Earth is made possible by complex interactions among all living things including micro-organisms.



**LEVELS OF BIODIVERSITY**

* Biodiversity can be studied and described at three levels:
  + \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  + \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  + \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Species vs Population**

1. **Diversity of number of species**

the **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** between populations of species, as well as between different species.

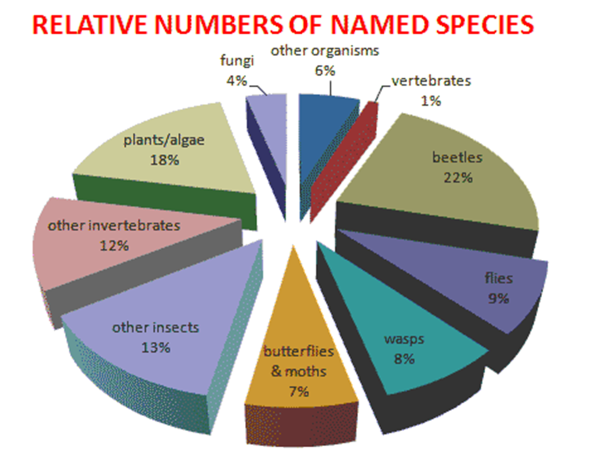
1. **Variety of ecosystems**

-- **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** of habitats, communities, & ecological processes within and between ecosystems.

1. **Genetic Diversity**

- all the **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** contained within all members of a population.

\_\_\_\_\_\_\_\_\_\_\_- a segment of DNA that is located in a chromosome –it codes for a specific hereditary trait.



**Benefits of Biodiversity**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** = Something that has value naturally

Biodiversity can affect the **\_\_\_\_\_\_\_\_\_\_\_\_\_** of ecosystems and the **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** of populations.

Healthy ecosystems ensure a healthy biosphere 🡪 It has balanced cycles of energy and nutrients.

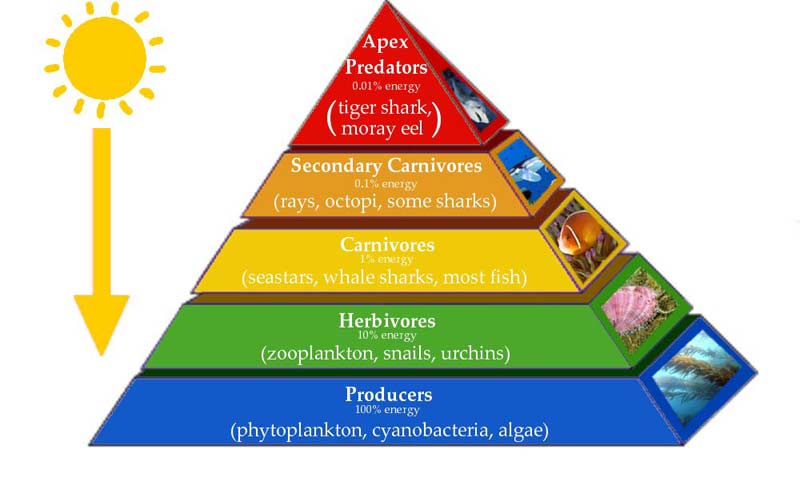
**Biodiversity has Utilitarian Value**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** = the value something has as a means to another’s end. Something that is functional

Utilitarian values include:

* + Goods like sustainable timber
  + Services like eco-tourism
  + Information -- National Park Wardens

**BIOMASS PYRAMID**



**COMPLETE THE BIOMASS ACTIVITY**

**CLOSING:**

WATCH THE VIDEO FROM THE LINK IN THE PRESENTATION

<https://www.youtube.com/watch?v=hRGg5it5FMI>

COMPLETE THE TICKET OUT THE DOOR QUESTIONS

1. What determines how many species live in a given place?
2. How many individuals of the species can live somewhere?
3. Briefly explain how biodiversity is important to ecosystems