

# Introduction to Environmental Science

## Scientific Process/ Inquiry Notes

- Scientific Inquiry begins with \_\_\_\_\_ and \_\_\_\_\_.

- Asking questions about the \_\_\_\_\_
- \_\_\_\_\_ systematic observations
- Researching what is already known
- Making \_\_\_\_\_ based on findings (Hypothesis)
- Planning Investigations/ experiments
- \_\_\_\_\_
- Posing answers or explanations
- Generating \_\_\_\_\_ to describe natural \_\_\_\_\_
- Using evidence to justify explanations
- \_\_\_\_\_ to others
- Evaluate other's \_\_\_\_\_

## Conducting an Experiment

- In experiments scientist study factors called \_\_\_\_\_ and \_\_\_\_\_ variables.
- \_\_\_\_\_ Condition/factor that is changed
- \_\_\_\_\_ Condition/Factor that is observed or measured
  - Changes in dependent variables "depend upon" changes in the independent variable.*
- Only \_\_\_\_\_ variable should be tested in an experiment.
- \_\_\_\_\_ - The group that does not receive the experimental treatment.

## Environmental Values and Attitude

A **value** is a rule that governs your \_\_\_\_\_.

How do you know that your feelings are true values?

- Have you \_\_\_\_\_ or \_\_\_\_\_ your view?
- Have you \_\_\_\_\_ about it?

An **attitude** is a \_\_\_\_\_ about something.

We usually have many attitudes. These are influenced by:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

Environmental problems are hard to solve because the solutions affect peoples values and attitudes. These are called \_\_\_\_\_.

### **Values That Affect Environmental Decision Making**

- \_\_\_\_\_ = what is beautiful or pleasing.
- \_\_\_\_\_ = the gain or loss of money or jobs.
- \_\_\_\_\_ = the protection of natural resources or species.
- \_\_\_\_\_ = the accumulation and sharing of knowledge.
- \_\_\_\_\_ = what is right or wrong.
- \_\_\_\_\_ = the maintenance of human health.
- \_\_\_\_\_ = human leisure activities.
- \_\_\_\_\_ = understanding of the natural world.
- \_\_\_\_\_ = the maintenance of human communities and their values and traditions.

### **Major Environmental Perspectives**

#### **1. Human Centered Perspective**

- Nature is only important when it benefits mankind in some way.
- \_\_\_\_\_ interest matters the most.
  - If an animal is thought to be \_\_\_\_\_ and it's habitat.

#### **2. Feeling Centered Perspective**

- All creatures that can feel pleasure or pain have rights. \_\_\_\_\_ such as insects or plants are not usually included.

#### **3. Life Centered Perspective**

- \_\_\_\_\_. Both more and less advanced. (Ex: PETA organization does not believe in humans keeping animals as pets)

#### **4. System Centered perspective**

- The entire functioning system/community in nature is more important than individual organisms. (\_\_\_\_\_ are managed under this philosophy)