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**Task – E-portfolio submission**

Answer the following questions and post both questions and answers to your e-portfolio.

* 1. ***Environmental Value System***

1. Which factors in your own community have an influence on your EVS?

The factors the have an influence on my EVS are the education, culture, economics, leaders, politics, media, people, family, and religion.

1. How does an EVS affect the way people respond to environmental issues?

EVS changes the way people respond to environmental issues as people prioritize what is more important to them. Anthropocentric people would respond more to social issues, while ecocnetric would take environmental issues as an important problem.

1. Which of these human activities is most likely to have a negative impact on the stability of global ecosystems?

A Decreasing water pollution levels

B Increasing recycling programs

C Decreasing habitat destruction

D Increasing world population growth

1. Discussion point: The philosopher Socrates said, ‘Not life, but good life, is to be chiefly valued.’ Discuss what this statement might mean today.

Today, this statement might mean that we shouldn’t be worries about just continuing to live, but rather think about how to live a healthy and sustainable life. This could be anthropocentric because it tells us to live a good life but that could mean damaging the environment.

***1.2 Systems and Models***

1. What is the difference between a transfer and a transformation in an ecosystem?

A transfer in an ecosystem is a flow through the system, involving a change in location. Transformations in an ecosystem lead to interactions in the system, changes of state or forming new end products.

1. Give one example of each of the following in an ecosystem: an input, an output, a storage.

In the process of photosynthesis, an example of an input is light energy/water/carbon dioxide, output is oxygen and storage is chemical energy such as sugar (glucose).

1. Give three advantages to drawing a model of climate change, and suggest three weaknesses of the modeling process.

Three advantages to drawing a model of climate change are:

1. Simplify complex systems and help predict what will happen if there are changes to inputs, outputs, or storages.
2. Allow inputs to be changed and outcomes examined without having to wait a long time, as we would have to if studying real events.
3. Easier to understand than detailed information about the whole system.

Three weaknesses of the modeling process are:

* 1. Models can be too simple it is wrong.
  2. Models and predictions depend on the skills and experience of people making them.
  3. Different models of the same system may predict different outcomes.

1. Discussion point:

Why do you think that scientists are keen to use models to communicate their ideas to the general public and politicians? What are the merits of presenting information in this way?

To show their ideas and what they predict will happen without making an actual social experiment that will impact the people. Also, to allow people to see and easy understand what is happening.

***1.3 Energy and Equilibria***

1. How does the first law of thermodynamics explain how energy moves through an ecosystem?

The first law of thermodynamics (conservation of energy) explains how energy moves through an ecosystem as it states that in an isolated system, energy is neither created nor destroyed, it is only transformed from one form to another).

1. What is meant by entropy and how does it relate to a natural system?

Entropy is a measure of the amount of disorder in a system. It relates to a natural system as it explains the inefficiency and decrease in available energy along a food. An increase in entropy from energy transformations reduces the energy available to do work as energy is broken down as it flows by (10% law).

1. Outline the difference between a steady-state equilibrium and a static equilibrium

Steady-state equilibrium is dynamic equilibrium in which the system as a whole remains more-or-less constant, even with continuous inputs and outputs of matter and energy. Static equilibrium is a stable equilibrium in which there is no change over time and in which the system will adopt a new equilibrium if disturbed.

1. The human population is growing at an exponential rate. Research the possible consequences of this example of positive feedback.

Exponential growth is an example of positive feedback. Exponential population growth happens when there is a surplus of resources that allows a plant or animal population to grow without limit. More population leads to more births, and more births lead to an increasing population. This means that more resources are required and needs must be given to them in a limited world.