

Chapter 2 – Science Society and Solutions

Section 2.1

There are different _____ to thinking about the environment.

_____ approach- As much nature as necessary should be converted for human use. Human creativity and ingenuity will solve environmental challenges as they arise.

_____ approach- Large portions of nature should be preserved intact. Nature has value apart from human use and should be protected at all costs.

_____ approach- Promotes Human well-being but considers a wider range of long-term management decisions that preserve the environment.

Many different areas of study contribute to solutions for environmental challenges

_____ science- which government policies lead to sustainable solutions?

_____ - how do people adopt new ideas?

_____ planning- what urban designs can reduce energy use?

_____ - can we design better vehicles?

_____ - what are the costs and benefits of different energy sources?

_____ - how does energy production effect population

_____ - how can we make better batteries?

On page 30 **study table 2.1 key fields of study** that are part of environmental science.

Four main methods of data collection

1. Air water and _____ samples- examining samples overtime measures how their quality is changing.
2. Ice _____ samples- ice fields in Antarctica have existed for many thousands of years. Studying the layers in the ice samples helps us understand passed global events and their effects.
3. _____ Sampling- one way of measuring biodiversity is to use a quadrat marker. A scientist can count the number of different species in a known area to measure biodiversity.
4. _____ data- data such as birth and death rates composure how human population is growing. Medical records can also indicate effects of air and water quality on human health.

An environmental impact assessment (_____) is done before any large scale environmental project to assess the possible effect on the _____. Large scale environmental projects may affect _____ species and their _____, movement of _____ birds, aboriginal peoples, etc.

Section 2.2**The Mindset of Environmental Scientists**

_____ - not blindly believing everything you read hear or see

_____ -mindedness - being willing to consider different points of view

_____ - being willing to stick with the task run long periods of time

Humility and _____ - be aware that conclusions might not be supported by a new evidence for information and being willing to change your mind

Critical thinking skills

_____ thinking involves skills associated with thinking independently, systematically, and

_____ thinking asks how can I break this problem down into smaller more manageable parts

_____ thinking asks how can I approach this problem in ways that are outside the box

_____ thinking asks how can reasoning help me think clearly

Reflective thinking asks how can I use my experiences and learning to help me make

_____ about what has happened and what should happen?

On page 35 study table 2.3

Page 36 tells us how individuals can influence society

The _____ - how can you be wise about the products you _____ and their effects on the environment?

The _____ - how can you give up your _____ to make the world a better place

_____ - can you commit to a cause that will help us live more sustainably?

The _____ - when you're old enough to vote what _____ will you support?

Heads up! Check out p. 46-7 to learn about some careers in Env. Science!