

Critical Thinking Skills

Ecology & the Environment

Ecosystems
 Classification & Adaptation
 Cells
 Ecology & the Environment - Big Book

Skills For Critical Thinking		Reading Comprehension								Hands-On Activities
		Section 1	Section 2	Section 3	Section 4	Section 5	Section 6	Section 7	Section 8	
LEVEL 1	Knowledge <ul style="list-style-type: none"> List Details/Facts Recall Information Match Vocab to Definitions Define Vocabulary Label Diagrams Recognize Validity (T/F) 	✓	✓	✓	✓	✓	✓	✓	✓	✓
LEVEL 2	Comprehension <ul style="list-style-type: none"> Demonstrate Understanding Explain Scientific Causation Rephrasing Vocab Meaning Describe Classify into Scientific Groups 	✓	✓	✓	✓	✓	✓	✓	✓	✓
LEVEL 3	Application <ul style="list-style-type: none"> Application to Own Life Model Scientific Process Organize & Classify Facts Use Alternative Research Tools 	✓	✓	✓	✓	✓	✓	✓	✓	✓
LEVEL 4	Analysis <ul style="list-style-type: none"> Distinguish Roles/Meanings Make Inferences Draw Conclusions Based on Facts Provided Classify Based on Facts Researched 	✓	✓	✓	✓	✓	✓	✓	✓	✓
LEVEL 5	Synthesis <ul style="list-style-type: none"> Compile Research Information Design & Application Create & Construct Imagine Self in Scientific Role 	✓	✓	✓	✓	✓	✓	✓	✓	✓
LEVEL 6	Evaluation <ul style="list-style-type: none"> State & Defend an Opinion Justify Choices for Research Topics Defend Selections & Reasoning 	✓	✓	✓	✓	✓	✓	✓	✓	✓

Based on Bloom's Taxonomy

NAME: _____



Ecosystems

1. Fill in the blanks using a word from the list below. You may use a dictionary to help.

system environment balance ecosystem biotic abiotic

- a) The word describes a group of things that work and live together in an environment.
- b) Something that is living is described as being .
- c) A is when all parts of a system work and live happily together.
- d) A group of things that work together is called a .
- e) When something is not living, for example a rock, it is called .
- f) The whole area surrounding something or something is called their .

2. List **FIVE** things that live in each of these places:

Rainforest	Desert	Handful of Soil	Planet Earth
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

3. Imagine you are stranded in the middle of a desert. Describe two living things and two non-living things that you might find there.



Ecosystems



What Is an Ecosystem?

Can you find two words in the bigger word, “**ECOSYSTEM**”? “Eco” means life forms and the environment in which they live. A “system” is a group of things that work together. Now put the two words back together.

An **ecosystem** is a group of things that work and live together in an environment. An example of an ecosystem is a rainforest, a pond, a city, or even our Earth!

What Is an Ecosystem Made Of?

Everything we see can be put into two groups. If you look around, you will see both **biotic** and **abiotic** things. **Biotic** describes something that is living or was once alive. **Biotic** things include frogs, leaves, dead trees and humans. **Abiotic** means everything else that is not living. **Abiotic** things include rocks, cars, computers, and gold.



Describe your own example of an ecosystem. What BIOTIC and ABIOTIC things would you find in your ecosystem?



How Big is an Ecosystem?

Ecosystems can be as big as a planet. They can also be as small as a puddle! Plants and animals live in ecosystems. Things that are too small to see also live in ecosystems. Everywhere you look, you can find an ecosystem.

Even a handful of soil is an ecosystem. There are many things living in soil. You may think that soil is just dirt. If you looked closely, you would find worms, bugs, sand and many more things. They are all part of the soil’s ecosystem.

All parts of an ecosystem work and live together. They are just like people who live in the same neighborhood or city. Humans have jobs and so do things in an ecosystem. They need to work together to live and be happy. This makes the ecosystem balanced. Without a balance, the ecosystem will not work!



Ecosystems



1. Draw a straight line from the word on the left to its definition on the right. Which word is left over? Use the reading passage or a dictionary to help you write out its definition.

1	system	Describes something that is not living, for example, a computer	A
2	biotic	Looks at life forms and the environment where they live	B
3	ecosystem	A group of things that work together	C
4	eco	Describes something that is living, for example, a frog	D
5	abiotic	_____ _____	E

SAMPLE

2. Circle **T** if the statement is TRUE or **F** if it is FALSE.

If it is false, rewrite the sentence to make it true.

T **F** a) Everything we see around us is living.

T **F** b) An ecosystem only works if there is a balance and all parts work and live together.

T **F** c) A desert, a prairie, a jungle and our planet Earth are all examples of ecosystems.

T **F** d) A handful of soil is too small to be called an ecosystem.

T **F** e) A dead tree is an example of an abiotic thing.
