**Part I.**

Draw a cat on the left side of your paper and a refrigerator on the right. Make a T-chart and list their similarities and differences.

biotic tree soil abiotic rain living leaf without physical plants biotic ecosystems abiotic adapted non-living without life butterfly life factors control sunlight grow

**Part II.**

 In each of the world’s \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ there are two things that influence the lives of the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ that live there: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ factors. The prefix a- is Greek for \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and –bios is the Greek word for \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. The term abiotic literally means \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Abiotic factors refer to the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ things in a plant’s \_\_\_\_\_\_\_\_\_\_\_ environment. Sunlight, \_\_\_\_\_\_\_\_\_, wind, \_\_\_\_\_\_\_\_\_\_, and temperature are all \_\_\_\_\_\_\_\_\_ factors. \_\_\_\_\_\_\_\_\_\_ factors are the \_\_\_\_\_\_\_\_\_\_\_\_\_ organisms in a plants environment. A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ pollinating a flower, a Monarch caterpillar munching on a \_\_\_\_\_\_\_\_, and a Robin’s nest in a \_\_\_\_\_\_\_\_are biotic factors.

Plants are \_\_\_\_\_\_\_\_\_\_\_\_\_\_ to the biotic and abiotic \_\_\_\_\_\_\_\_\_\_\_ in the environment in which they grow. In the conservatory, scientists can \_\_\_\_\_\_\_\_\_\_\_\_\_\_ those factors. Factors such as water, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, temperature, and soil. By having a conservatory, we are able to grow plants that would not naturally \_\_\_\_\_\_\_\_\_\_\_in this area.

**Part III.**

1. \_\_\_\_\_\_\_\_\_\_\_\_\_ the study of the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ between biotic and abiotic factors in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_ includes all \_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_ factors in one particular environment.

Definition Use the word in a sentence.

Give Examples Write a test question.

Definition Use the word in a sentence.

Give Examples

1. TRUE or FALSE: Ecosystems have clear boundaries due to biotic and abiotic changes.
2. TRUE or FALSE: Ecosystems can change daily as things move from one ecosystem to another.
3. Biotic changes that cause things to move from one ecosystem to another: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. Abiotic changes that cause things to move from one ecosystem to another: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Part IV.** Complete the Venn diagram and determine which are examples of abiotic and biotic.

Abiotic Biotic

Whale Clock Water Fish Paper Glass Aluminum Wooden Ruler Sand Clouds Corpse Snail Steak Pork Chops Salad Bread Plant Hair Finger Nails Pipe Cotton Fabric Wool Gold Plastic Grapes Air

1. Biotic factors \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ with each other in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ways, such as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, mutualism, and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
2. Biotic factors also interact with \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in the ecosystem. Biotic factors are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ upon water, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, temperature, and \_\_\_\_\_\_\_\_\_\_\_.

Part V. Using the picture, make a list of all the factors that are abiotic and biotic.





Abiotic Biotic

\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_

**Part VI.** The following list of words needs that need to be placed into the category “biotic” or “abiotic” Place an “A” on the line if the word describes an abiotic factor and a “B” on the line if the word describes a biotic factor.

\_\_\_\_\_\_\_ Whale \_\_\_\_\_\_ Clouds \_\_\_\_\_\_\_ Fish

\_\_\_\_\_\_\_ Clock \_\_\_\_\_\_\_ Gold \_\_\_\_\_\_\_ Grapes

\_\_\_\_\_\_\_ Water \_\_\_\_\_\_\_ Plastic \_\_\_\_\_\_\_ Air

\_\_\_\_\_\_\_ Paper \_\_\_\_\_\_\_ Aluminum \_\_\_\_\_\_\_ Glass

\_\_\_\_\_\_\_ Wooden Ruler \_\_\_\_\_\_\_ Finger Nails \_\_\_\_\_\_\_ Sand

\_\_\_\_\_\_\_ Corpse \_\_\_\_\_\_\_ Snail \_\_\_\_\_\_\_ Salad

\_\_\_\_\_\_\_ Bread \_\_\_\_\_\_\_ Plant \_\_\_\_\_\_\_ Hair

\_\_\_\_\_\_\_ Pipe \_\_\_\_\_\_\_ Cotton Fabric \_\_\_\_\_\_\_ Wool