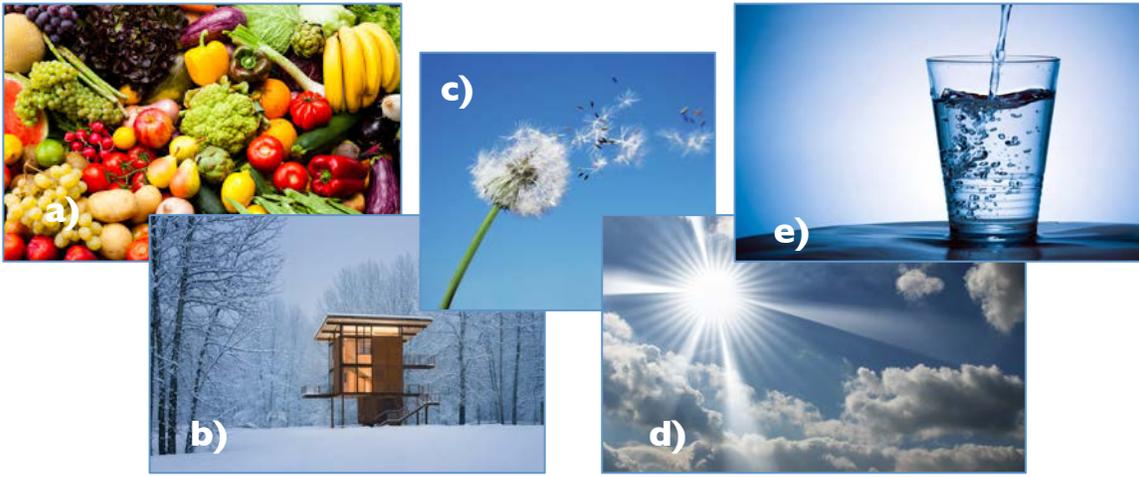


Name:

Flexible Flora (Teacher Version)

What do living things need to stay alive?



Explain why a plant or animal would need these things to survive, and provide an example:

- a) *Plants and animals need their own types of food to grow, repair themselves, and to reproduce. For example, humans need fruits and vegetables to give their body the proper vitamins and nutrients.*
- b) *Plants and animals need shelter from the environment and from predators. For example, beavers build dams as their shelters to stay in during the winter months and live out of during the rest of the year.*
- c) *Plants and animals both need their own type of “air” to breath. For example, fish take in oxygen out of the water to breathe through their gills.*
- d) *Plants especially need sunlight to make their own food. For example, a daisy absorbs sunlight and uses it to make a sugar (chlorophyll).*
- e) *Plants and animals need water so their different parts can function properly. For example, if a bean sprout doesn't get enough water, it will wither and die.*

Adaptation Station

When an animal or plant has trouble getting the things it needs to survive, over time it may adapt to its new environment. Can you see how the following living creatures have adapted?

Camel: *The camel has adapted to store water in its humps on its back to save it for long periods of travel through deserts without water.*

Caterpillar: *The caterpillar has adapted to disguise its back end as a face! That way a predator will go for the wrong end and it will have a better chance of survival.*

Cactus: *Cacti grow in very dry areas, and so they've adapted similarly to the camel in the sense that they store water within themselves.*



Name: _____

Bending Plants!

Materials:

- Store-bought bean seeds.
- 1 cup
- Soil
- Water
- 1 cardboard milk container



Instructions:

1. Fill the cup with soil and plant 3 seeds, adding a bit of water every day.

2. When the plants are 5-8cm tall, remove all but one of the plants.

3. Cut the bottom of the milk carton (about 8cm from the top of the carton), then cut a 3x3cm square off one side of the box.

4. Add lots of water, and place the plant on a table/window, covered by the carton. Let sit for 5-10 days before the plant appears in the hole.

Talk About It!

1. If you remove the box, what do you notice about the plant?
Its stem is bent!

2. Why do you think the plant “bent” itself? *So that it could reach the sun’s rays, which it depends on to grow and stay healthy.*



Human Impact

We have to be careful how we as humans affect the ecosystems around us! Some big problems we are facing are **soil contamination**, **water contamination**, and **air contamination**.

Can you match these issues up with the pictures below?

What can we do to help lessen our impact on other living things?

Walk/bike/carpool instead of driving alone, don't waste electricity or water, recycle, compost.



Name:

Image Sources:

What Do Living Things Need to Survive?

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Talk About It!

1. TUM: <https://www.tum.de/nc/en/about-tum/news/press-releases/short/article/30854/>

Human Impact:

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2. China.org: http://china.org.cn/environment/2013-01/28/content_27817785.htm
3. En Cognitive: <http://www.encognitive.com/node/10685>