

Tree Ag Mag - Vocabulary

Asking and Responding to Open-Ended Questions

Directions: Read the passage and then answer the questions on the next page.

Taken from *Green Living for Dummies*
By Yvonne Jeffery, Liz Barclay, and Michael Grosvenor

What, exactly, does *green* or *sustainable living* mean? Different people use different definitions, but it all comes down to one fundamental concept: The Earth's resources shouldn't be depleted faster than they can be replenished. From that concept comes everything else, including caring for the environment, animals and other living things, your health, your local community, and communities around the world.

Thankfully, it's not too late to make the changes that the planet and its people need for a safe, healthy, prosperous, and compassionate future.

A useful way to understand your impact on the environment is to measure your *ecological footprint*, which is the land needed to support your consumption of goods and resources. Think of it as a way of describing the amount of land required to farm your food, mine your energy sources, transport your goods and services, and hold your waste. You make decisions every day that have an impact on the planet: choosing between the car and local rapid transit, for example, or selecting local or organic fresh food instead of packaged, processed food that has been transported long distances. Think about the impact that each individual decision had, and weigh the pros and cons of your everyday actions.

One way to live a more *green* lifestyle is to minimize your trash. For many people, trash is "out of sight, out of mind" as soon as it leaves their homes. But that's not the end of a trash's journey; it's just the beginning. For every item you throw out, there's hidden waste - the raw materials that went into its production and the resources such as water and energy that fueled the process, from raw materials to finished goods to land-fill. And much of that energy comes from nonrenewable sources.

The green living ideal is to reduce your trash so much that you produce no waste at all. It's far more practical to focus on reducing your trash as much as you can. Zero waste will become more achievable as recycling and packaging practices catch up with today's culture.

Tree Ag Mag - Vocabulary

Asking and Responding to Open-Ended Questions

Directions: Read the passage and then answer the questions.

1

What are some specific actions a person can take to live a *green* lifestyle?

2

How do you think the planet will benefit from someone living a *green* lifestyle?

3

Write two more questions that come to mind after reading this passage. The questions should be open-ended.

Trees Ag Mag - Math - Solving Linear Equations

Directions: Choose the best answer.

1

What is the value of t if
 $t \times 13 = 39$?

- A 2
- B 3
- C 4
- D 5

2

Which equation shows the total number of trees on a tree farm if there are 2 times as many deciduous trees as there are coniferous trees and there are 108 trees total?

- A $2c = 108$
- B $c + d = 108$
- C $c \times d = 108$
- D $2c + d = 108$

3

If $q - 26 = 30$, then $q = \underline{\hspace{2cm}}$?

- A 56
- B 23
- C 19
- D 5

4

What is the value of m if
 $63 \div m = 9$?

- A 6
- B 7
- C 8
- D 9

Trees Ag Mag - Math - Solving Linear Equations

Directions: Choose the best answer.

5

Which equation shows the total attendance at the Arbor Day festivities if 47 adults and 83 children attended?

- A $47 \times 83 = t$
- B $47 - 83 = t$
- C $47 + 83 = t$
- D $47 \div 83 = t$

6

What is the value of b in the following equation?

$$53 - (4 \times b) = 7 \times 7$$

- A 1
- B 2
- C 3
- D 4

7

Kelly has 446 trees to plant for an Earth Day celebration. If she plants 136 on the first day and 143 on the second day, which equation shows how many trees she has left to plant?

- A $446 + 136 + 143 = x$
- B $x + 136 - 143 = 446$
- C $446 - 136 + 143 = x$
- D $136 + 143 + x = 446$

8

What is the value of c in the following equation?

$$c \div 14 = 13$$

- A 5
- B 182
- C 390
- D 624

Tree Ag Mag - Reading Passage

Taken from *Life Science* by Prentice Hall

Have you ever seen a tree that has grown wider than a car? Do trees this huge really exist? The answer is yes. Some giant sequoia trees, which grow almost exclusively in central California, are over ten meters wide. You can understand why giant sequoias are commonly referred to as “big trees.” It takes a long time for a tree to grow so big. Scientists think that the largest giant sequoias may be about 2,000 years old. One reason they live so long is because their bark is fire-resistant.

The giant sequoia trees belong to the group of seed plants known as gymnosperms. A gymnosperm (JIM nuh spurm) is a seed plant that produces naked seeds. The seeds of gymnosperms are “naked” because they are not enclosed by any protective covering.

Every gymnosperm produces naked seeds. In addition, many gymnosperms also have needlelike or scalelike leaves, and deep-growing root systems. Although a few kinds of gymnosperms are shrubs or vines, most are trees.

Gymnosperms are the oldest type of seed plant. According to fossil evidence, gymnosperms first appeared on Earth about 360 million years ago. Fossils also indicate that there were many more species of gymnosperms in the past than today. Today, gymnosperms are classified into four groups—the cycads, the ginkgo, the gnetophytes, and the conifers.

Most gymnosperms have reproductive structures called cones. Cones are covered with scales. Most gymnosperms produce two types of cones: male cones and female cones. In some types of gymnosperms, however, individual trees produce either male cones or female cones. A few types of gymnosperms produce no cones at all.

Male cones produce tiny grains of pollen. Pollen contains the microscopic cells that will later become sperm cells. Female cones contain at least one ovule at the base of each scale. An ovule (OH vyool) is a structure that contains an egg cell. After fertilization occurs, the ovule develops into a seed.

Tree Ag Mag - Reading Passage

Directions: Read each question and choose the best answer.

1

A seed plant that produces “naked” seeds is called a _____.

- A Gymnosperm
- B Angiosperm
- C Monocot
- D Dicot

2

_____ are the reproductive structures of gymnosperms.

- A Leaves
- B Cones
- C Stems
- D Needles

3

The structure that contains the egg cell in a gymnosperm is a(an) _____.

- A Cone
- B Leaf
- C Ovule
- D Needle

4

Giant sequoia trees are believed to live so long because _____.

- A They have no predators.
- B They have fire-resistant bark.
- C They grow so quickly.
- D They are so young.

Tree Ag Mag - Reading Passage

Directions: Read each question and choose the best answer.

5

The oldest type of seed plant is the _____.

- A Angiosperm
- B Monocot
- C Gingko
- D Gymnosperm

6

Which of the following belong to the classification of gymnosperm?

- A Conifers
- B Cycads
- C Gnetophytes
- D All of the above

7

Tiny grains of pollen are produced by _____ cones.

- A Female
- B Male
- C Old
- D Young

8

Most kinds of gymnosperms are _____.

- A Shrubs
- B Vines
- C Trees
- D None of the above

Extended Response—TREES

Trees play an important role in protecting our environment. Examine the role trees play in improving and protecting the environment we live in. Also, consider how recycling products made from trees impacts the environment. Consider Sustainable Forest Initiatives as well.