

Name: _____ Num.: _____ Date: _____

Plants Are Food Factories

by Cindy Grigg, edHelper.com

Many of the things we use are made in factories. Cars, for example, are made in factories. A factory takes raw materials and turns them into new products. Steel is turned into car bodies. Rubber is turned into car tires. Cloth is turned into car seats.

Photosynthesis: Plants are like factories that make food. How do they do it? The process is called photosynthesis (foe toe SIN thuh sis). Photo means "light." Synthesis means "putting together." Plants use light from the sun to put together raw materials to make their own food in a process called photosynthesis.

Plants need sunlight, water, and carbon dioxide to make food. Plants use the raw materials of water, nutrients they absorb from soil, and carbon dioxide to make sugars the plant can use. Energy from the sun and chlorophyll are also needed. Plants use about ninety percent of the food they make to grow and reproduce. About ten percent is stored in the plant's tissues. When animals eat plants, they take in the stored energy.

Leaves are the plant's food factories. When you look at a plant, the first things you probably see are the plant's leaves. Almost all photosynthesis takes place in the leaves. Chloroplasts in the plant contain the chemical chlorophyll. This gives plants their green color. Chlorophyll changes the light energy from the sun into chemical energy the plant uses for photosynthesis.

Products of photosynthesis: A plant uses carbon dioxide, water, and energy from the sun. It produces glucose, a type of sugar. It also makes oxygen, which the plant doesn't need. Oxygen is given off as a waste. Small amounts of water are, also.

Photosynthesis is very important to all life on Earth. Almost all animals on Earth depend on plants for food. Plants are the main producers in the food chain. Animals also need the oxygen that is given off by photosynthesis. In turn, animals give off carbon dioxide as a waste, which is needed by plants.

1. Plants are like factories that make food. This is an example of a _____

- A. synonym - two things that mean the same thing
- B. alliteration - words that begin with the same sound
- C. metaphor - saying one thing is another
- D. simile - comparing two things using "like" or "as"

2. What are the products of photosynthesis?

- A. carbon dioxide and water
- B. oxygen and water
- C. sugar, oxygen, and water
- D. none of these

3. Most photosynthesis takes place in the _____

- A. roots
- B. stem
- C. trunk
- D. leaves

4-6. What three materials do plants need to make food?

7-8. Name two other things that plants need to make food.

9. What do plants use the food they make to do?

10. How is a plant like a factory?

All Kinds of Plants

by Kate Paixao, readworks.org

Plants come in many sizes and shapes. Some are big. Giant sequoia trees can grow to be 275 feet tall. Other plants are small. Some mosses are so small you cannot see them.

Some plants live in dry places. Cactus plants live in hot, dry deserts. Some plants live in wet places. Seaweed floats in the ocean.

Some plants make their own food. Most plants use energy from the sun to make food. Others catch food. The Venus flytrap catches flies to eat.

1. What plant can grow to be 275 feet tall? (circle one)

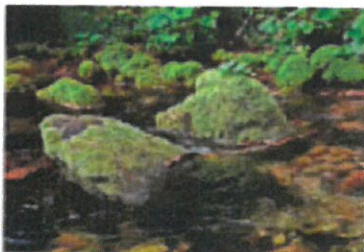


moss



giant sequoia trees

2. What plants are small? (circle one)



moss

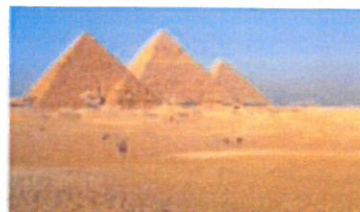


giant sequoia trees

3. Where do cactus plants live? (circle one)



oceans



deserts

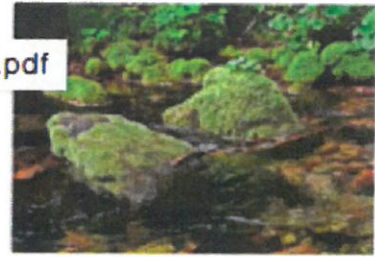
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4. What plants live in the ocean? (circle one.)



seaweed

04. Plants Are Food Factories.pdf



mosses

5. Where do most plants get energy to make food?

6. Name a plant that stays small like mosses.

7. Why do you think it is important to have plants in the ocean?

8-9. Draw and label a Venus flytrap catching food.

A large, empty rounded rectangle with a thin black border, intended for a student to draw and label a Venus flytrap.

Plant Life Cycles

by K12Reader

Every living thing goes through changes. Living things grow through different stages. Then they reach the end of their life cycles and die. There are many kinds of plants. Each kind has its own life cycle.

Many plants start their life cycles as a seed. The seed needs certain things or it will not grow into a plant. Sometimes seeds wait in the ground until they can get the things they need. They wait for warmth from the sun. They wait for water. When they have what they need, they start to grow. A tiny little sprout will push out of each seed. The sprouts stretch up until they poke through the dirt and into the air.

The plants continue to grow when they get sunshine and water. The stems grow taller and leaves unfold. More leaves and stems grow on the main stems. The adult plants grow flowers. The flowers of many plants make fruit. The fruit has seeds inside it so more new plants can grow.

New plants look like their parent plants. Seeds from a parent plant will grow into the same kind of plant as the parent. When a seed begins to grow, it is the beginning of another plant life cycle.

1. Every living thing _____
A. grows B. changes C. dies D. all of these
2. In which paragraph would you find information about what a plant needs to grow?
A. paragraph 1 B. paragraph 2 C. paragraph 3 D. paragraph 4
3. What is the process of living, growing, changing, and dying called?

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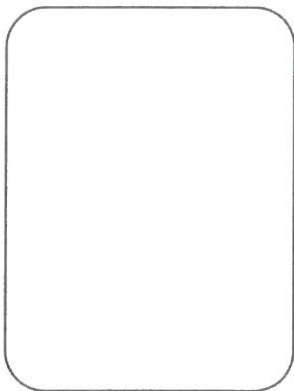
4. How do many plants begin?

5. Where can you usually find seeds in an adult plant?

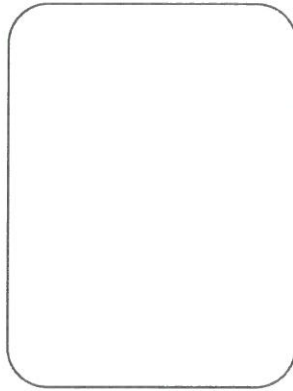
6-7. What two things does a seed need to have with it in the ground to be able to grow?

8. What kind of plant will a seed grow into?

9-12. Illustrate the stages of a plant's life cycle. Label the seed, stem, and leaves.



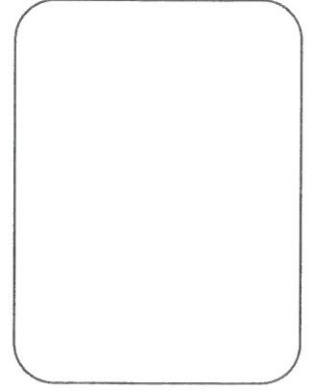
seed
sprouting



sprout pokes
through the dirt



leaves
unfold



adult plants
grow flowers

Name _____

Plurals s, es

Lesson 4

► Read the Spelling Words. Write each word where it belongs.



Living Things



1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

Other Things

7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____

Spelling Words

1. ants
2. toys
3. flies
4. things
5. boxes
6. games
7. lines
8. rocks
9. wishes
10. ladies
11. dishes
12. babies
13. bushes
14. glasses
15. puppies



Handwriting Tip

When you write a word, remember not to write the letters too close together or too far apart.

rocks



Name _____

► Read the passage. Write each numbered word as a plural to make a Spelling Word.

The (1) (lady) on our street are having a yard sale today. They have many (2) (thing) for sale. There will be (3) (toy), (4) (game), (5) (dish), and (6) (glass). There are (7) (puppy) too! Let's go and look in all the (8) (box)!

- | | |
|----------|----------|
| 1. _____ | 5. _____ |
| 2. _____ | 6. _____ |
| 3. _____ | 7. _____ |
| 4. _____ | 8. _____ |



Spelling Words

1. ants
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► Put these Spelling Words in alphabetical order.

ants flies bushes babies

- | | |
|-----------|-----------|
| 9. _____ | 11. _____ |
| 10. _____ | 12. _____ |



Spelling Strategy

Plural Rules: When a word ends with a consonant + y, then change the y to i and add es. If a word ends with a vowel + y, then add s.

Name _____

Short Vowels

a, e, i, o, u

Lesson 5

▶ Write the Spelling Words that have short vowel sounds.

1. _____

2. _____

3. _____



▶ Read each word. Write the Spelling Word that rhymes.

4. spies _____

5. seam _____

6. roast _____

7. main _____

8. row _____

Spelling Words

1. clock

2. drink

3. moved

4. waking

5. hopped

6. folded

7. stain

8. layer

9. team

10. slow

11. toast

12. ladies

13. flies

14. bushes

15. games

▶ Write the Spelling Word that completes each sentence.

9. Mary _____ the chair from my room to her room.

10. The baby is _____ up from his nap.

11. Jan and David played two _____ of ball before dinner.

12. Our dog hid in the _____.

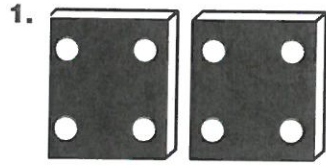
13. I want a two _____ birthday cake.

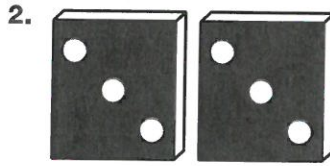
14. We _____ the picnic blanket when it was time to leave.

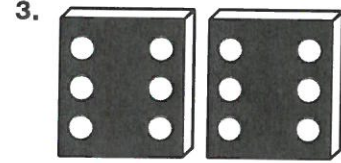
15. Older _____ sometimes dress up when they go shopping.

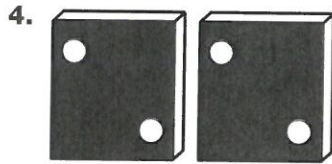
Double Dominoes

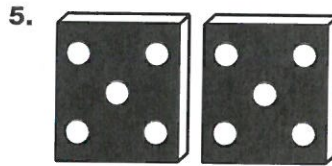
Write two multiplication sentences to describe each set of dominoes. There is one set for which you can only write one sentence. Which set is it? Place a star next to it.

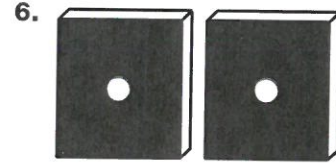






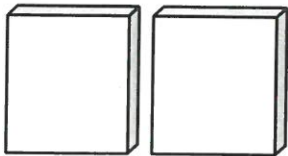




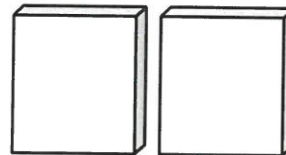


Design your own new domino doubles. Draw dots on the dominoes to show each multiplication sentence. Write the correct product for each.

7. $2 \times 10 =$ _____



8. $2 \times 8 =$ _____



Multiply With 4

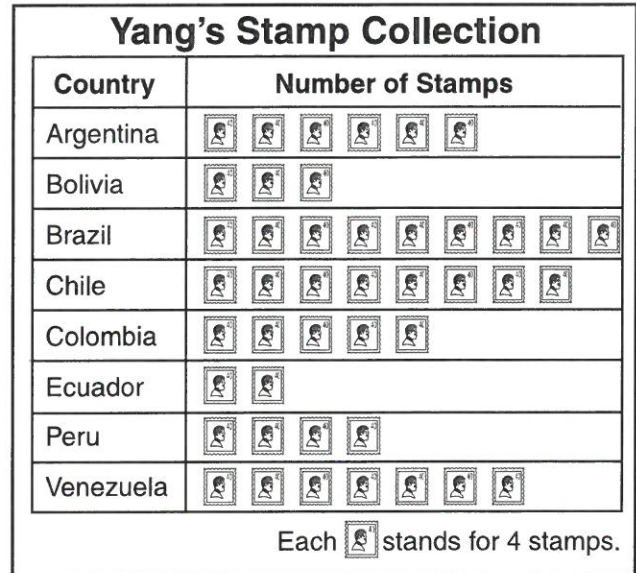
Use Data Yang collects stamps from countries in South America. He made the pictograph below to show his collection. Use the pictograph to solve each problem.

1. How many stamps does Yang have from Argentina?

2. How many stamps in Yang's collection are from Venezuela?

3. From which country does Yang have the most stamps? How many of those stamps does he have?

4. **What's Wrong?** Yang's sister Hyun looks at his pictograph and says that Yang has 8 stamps from Chile in his collection. What mistake did Hyun make?



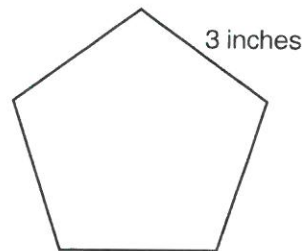
Multiply With 5

Solve each problem.

1. Kojo has the coins shown at right. Write two different multiplication sentences to find the total amount of money Kojo has.



2. A pentagon has 5 sides. All the sides of a regular pentagon have the same length. What is the total distance around the regular pentagon at the right?



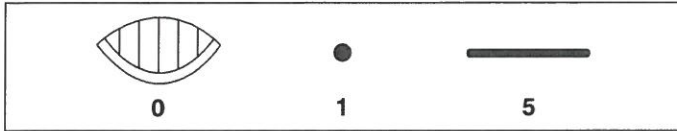
3. **You Decide** Tessa wrote the multiplication sentences shown at the right. Without multiplying, how can you tell which of Tessa's multiplication sentences is correct?

<i>Tessa</i>	
$5 \times 27 = 134$	_____
$5 \times 39 = 195$	_____
$5 \times 42 = 208$	_____
$5 \times 51 = 251$	_____

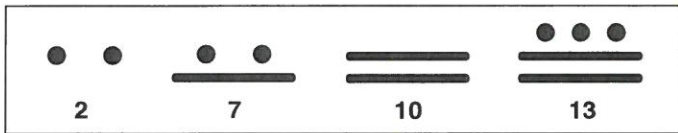
4. **Reasoning** What is the greatest possible product you get when you multiply 5 by a one-digit number?

Mayan Multiplication

The Maya lived in the rain forest regions of Central America about 3,000 years ago. The Mayan number system included only three symbols, shown below.



To write any number, the Maya combined the symbols for 1 and/or 5.



Use our number system to write each Mayan multiplication problem as a multiplication sentence with its product.

1. ● ● ● × ● ●

2. × ● ● ●

3. ● ● ● ● × ● ● ●

4. ● ● ● ×

5. ● ● ● × ● ● ●

6. ● ● ● × ● ● ● ●

7. ● ● ● × ● ● ●

8. ● × ● ● ●
