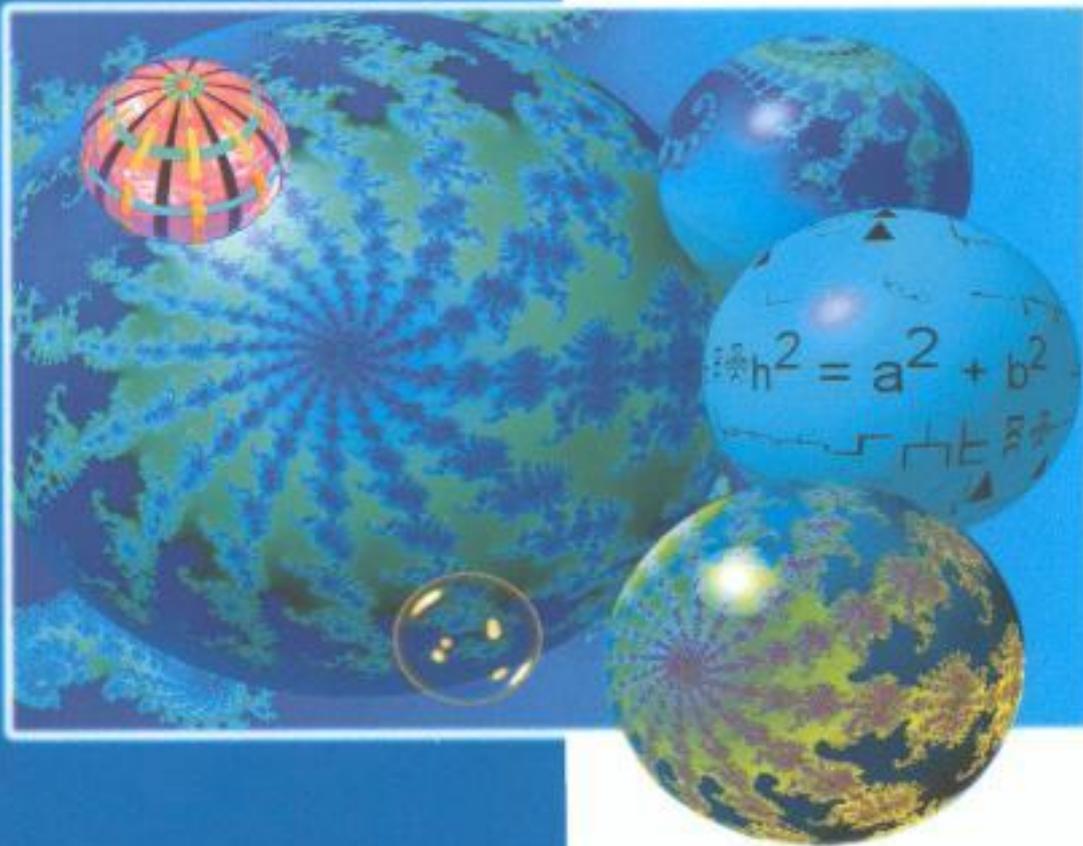




LIFEPAC  
GOLD



**SCIENCE**



# SCIENCE 108 ALL ABOUT ENERGY



## CONTENTS

|  |               |
|--|---------------|
| <b>I. GOD GIVES ENERGY</b> .....               | <b>2</b>      |
| Sun .....                                      | 4             |
| Wind .....                                     | 8             |
| Water .....                                    | 14            |
| <br><b>II. WE USE ENERGY</b> .....             | <br><b>19</b> |
| We Use Animals .....                           | 20            |
| We Use Fuels .....                             | 22            |
| We Use Electricity .....                       | 24            |
| We Learn New Ways to Make Energy .....         | 26            |
| <br><b>III. WE CAN USE ENERGY WISELY</b> ..... | <br><b>34</b> |
| We Waste Fuel .....                            | 36            |
| We Can Save Energy .....                       | 38            |

**Author:**

**Jean M. Polowski**

**Phyllis A. MacDonald, M.Ed.**

**Editor:**

**Mary Ellen Quint, M.A.**

**Consulting Editor:**

**Harold Wengert, Ed.D.**

**Revision Editor:**

**Alan Christopherson, M.S.**

## Alpha Omega Publications

a division of:

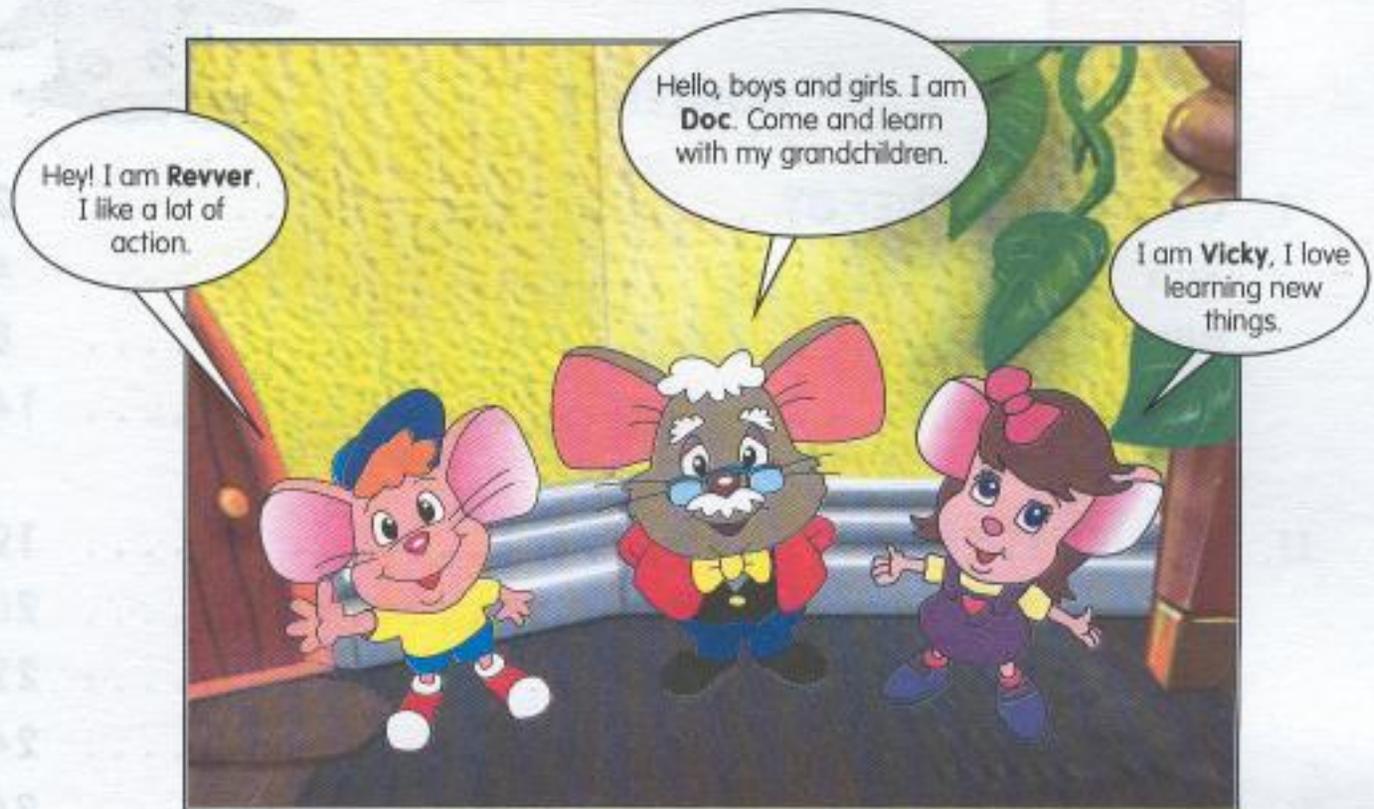
### Bridgestone Multimedia Group

300 North McKemy Avenue, Chandler, Arizona 85226-2618

Copyright © MCMXCV, All rights reserved



## Learn with the Bridgestone characters:



When you see me, I will help your teacher explain the exciting things you are expected to do.



When you do actions with me, you will learn how to write, draw, match words, read, and much more.



You and I will learn about matching words, listening, drawing, and other fun things in your lessons.

# ALL ABOUT ENERGY

\_\_\_\_\_  
-----  
"Hi \_\_\_\_\_,  
your name

My name is Sunny.  
I am using energy.  
Using energy is fun.



Come with me.  
We will find out  
about energy.  
We will learn where it comes  
from.  
We will find out how to  
save it, too."

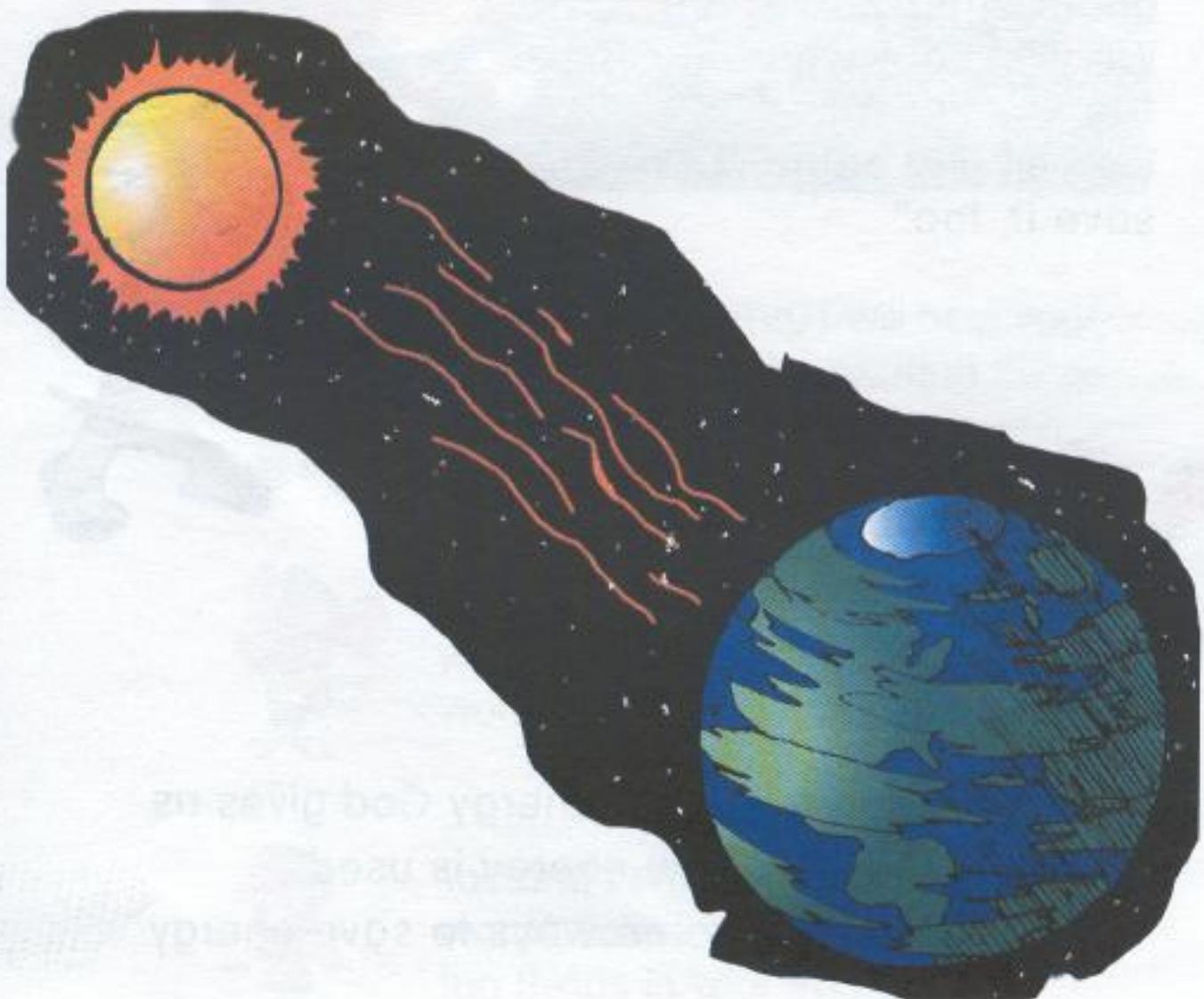


## Objectives

1. I can tell about energy God gives us.
2. I can tell how energy is used.
3. I can tell some ways to save energy.

## I. GOD GIVES ENERGY

God made the world.  
Everything in God's world  
that grows needs energy.  
Everything in God's world  
that changes needs energy.  
God made the sun.  
The sun gives energy to the world.

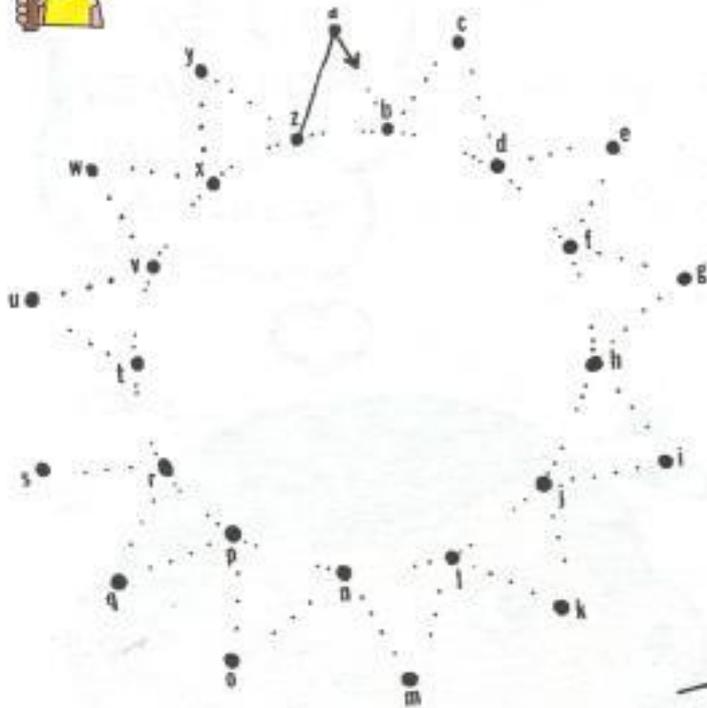




Follow the dots to find where energy comes from. Start with a.



Color the picture. Draw yourself in the picture.

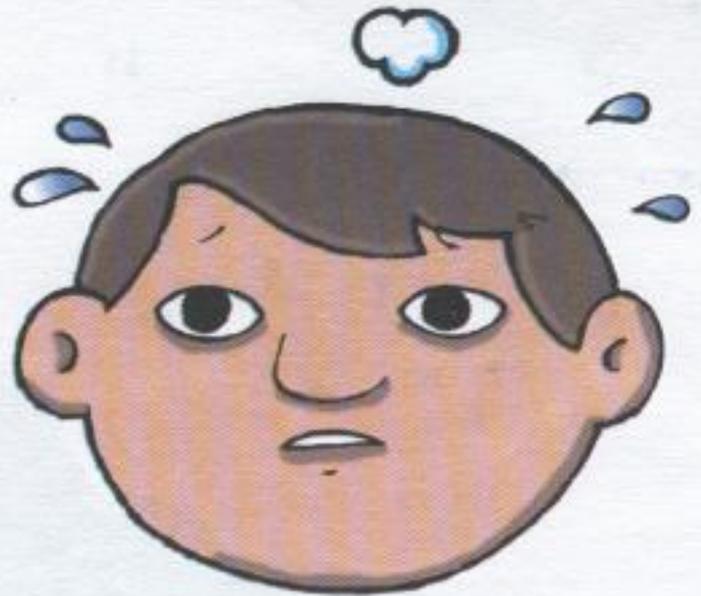


## Sun



God made the sun.  
The sun gives light.  
Light is energy.  
We can see light.

Light energy changes.  
It changes  
to heat energy.  
We can feel heat.





Read the sentences. Write the words in the blanks.

|        |     |         |
|--------|-----|---------|
| energy | God | changes |
| light  | see | feel    |

\_\_\_\_\_ made the sun.

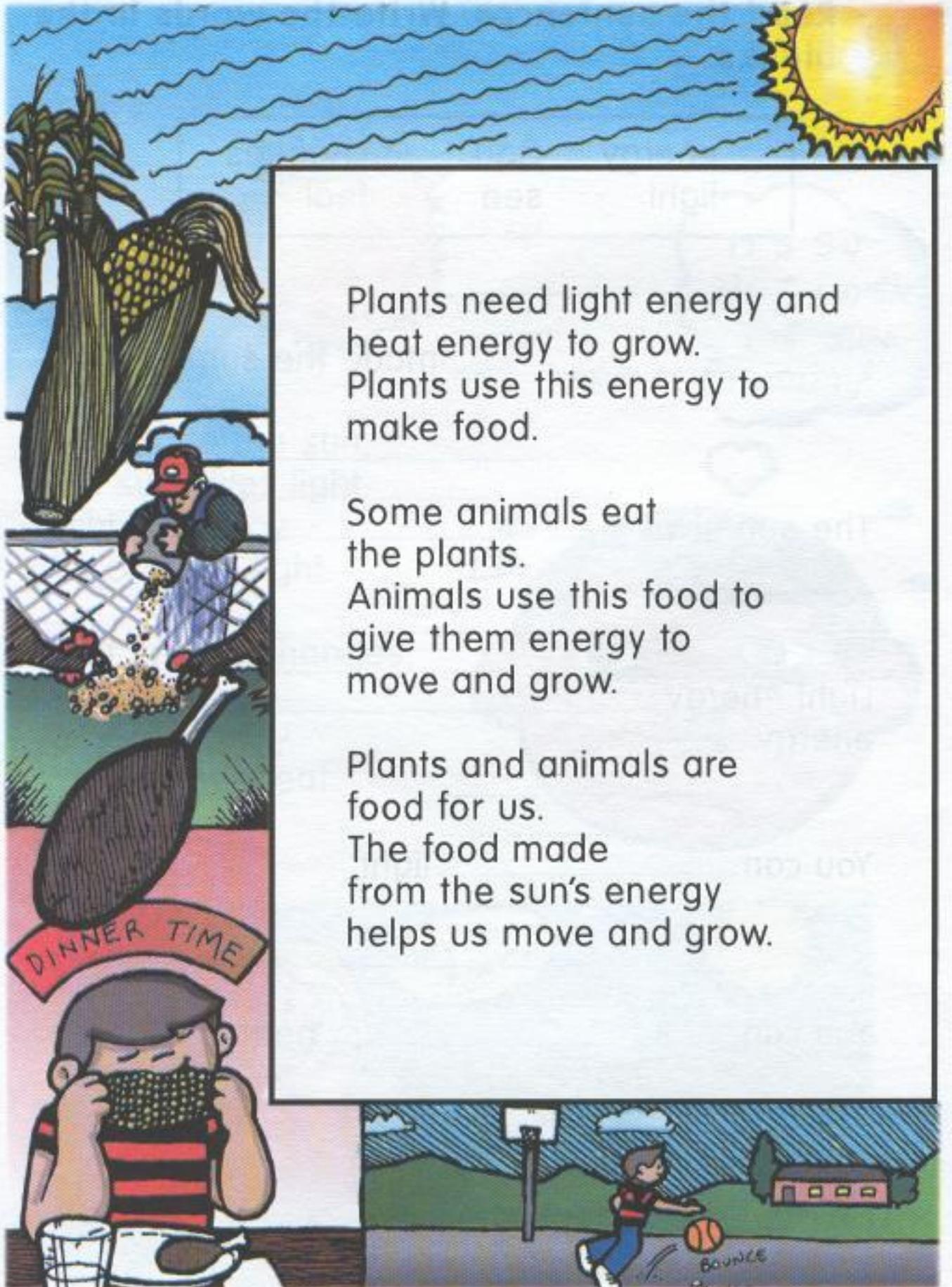
The sun gives \_\_\_\_\_.

Light energy \_\_\_\_\_ to heat energy.

You can \_\_\_\_\_ light.

You can \_\_\_\_\_ heat.

Light is \_\_\_\_\_.



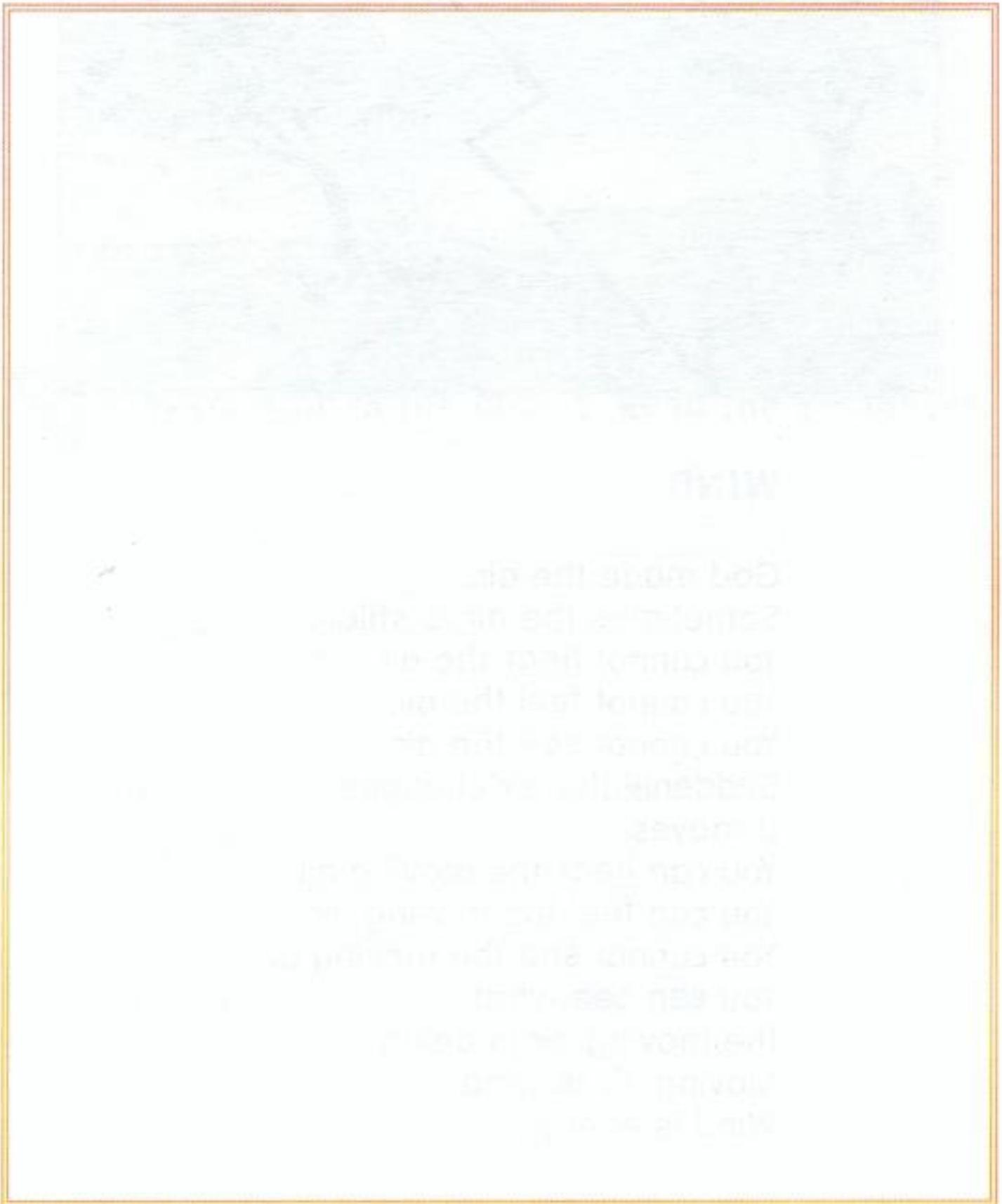
Plants need light energy and heat energy to grow. Plants use this energy to make food.

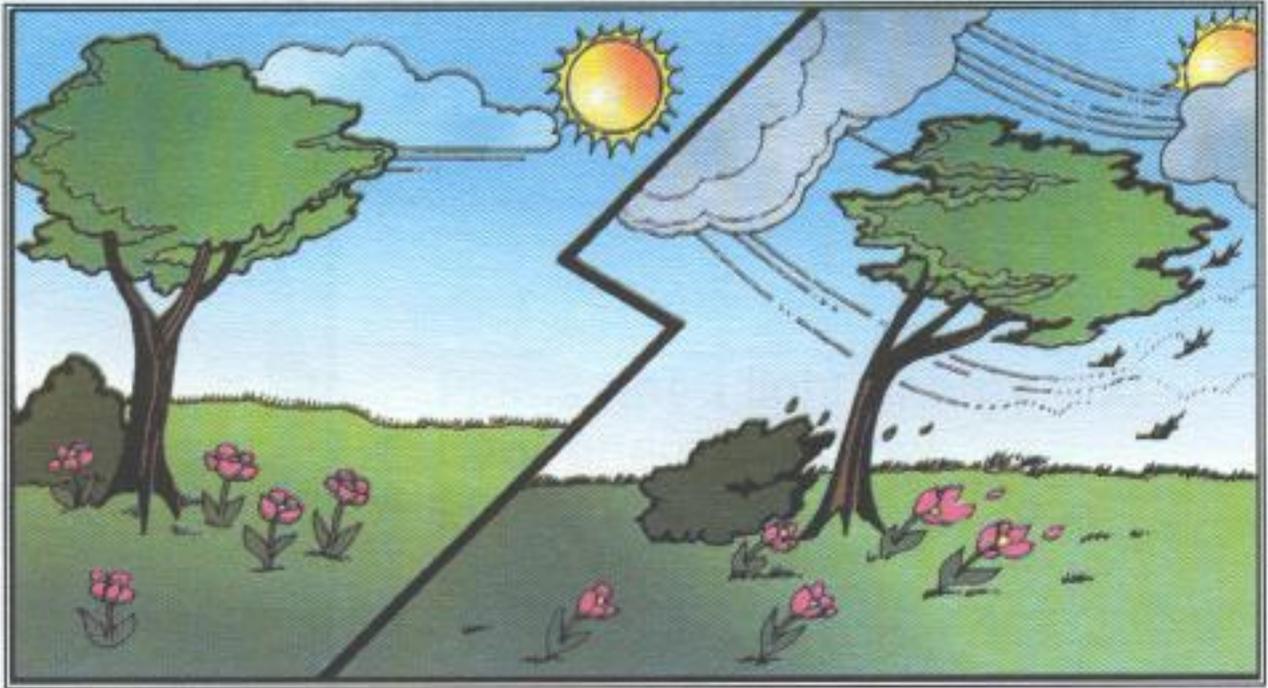
Some animals eat the plants. Animals use this food to give them energy to move and grow.

Plants and animals are food for us. The food made from the sun's energy helps us move and grow.



**Draw five plants that you like to eat.**





## WIND

God made the air.  
Sometimes the air is still.  
You cannot hear the air.  
You cannot feel the air.  
You cannot see the air.  
Suddenly the air changes.  
It moves.  
You can hear the moving air.  
You can feel the moving air.  
You cannot see the moving air.  
You can see what  
the moving air is doing.  
Moving air is wind.  
Wind is energy.

See the windmill!  
Wind can turn the big wheel.  
The windmill can work.  
It can pump water.  
It can make electricity.  
Wind energy can do good work.



**Write wind in the blanks. Read the sentences.**

Moving air is called \_\_\_\_\_.

A little \_\_\_\_\_ can turn  
your wheel.

A bigger \_\_\_\_\_ can turn  
a bigger wheel.



Read this story.

## The Big Wind Did It

One day Chuck and Buck were riding in a truck.

A big wind picked up the truck and put it in a muddy hole.

"Oh, oh!" said Chuck.

"We are stuck."

"Yes," said Buck.

"We have a stuck truck."

Chuck and Buck were sad.

Mr. Crest saw them.

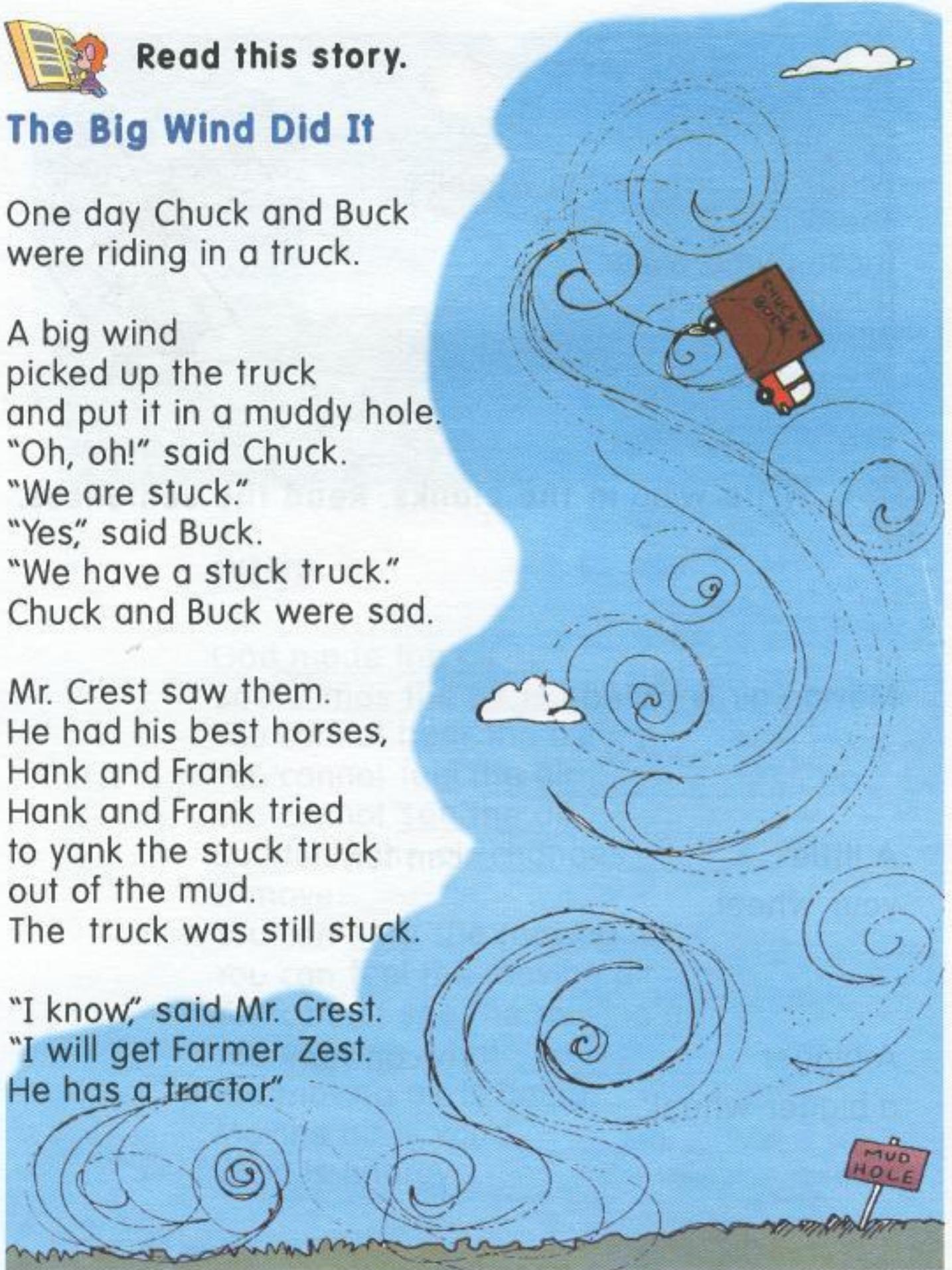
He had his best horses, Hank and Frank.

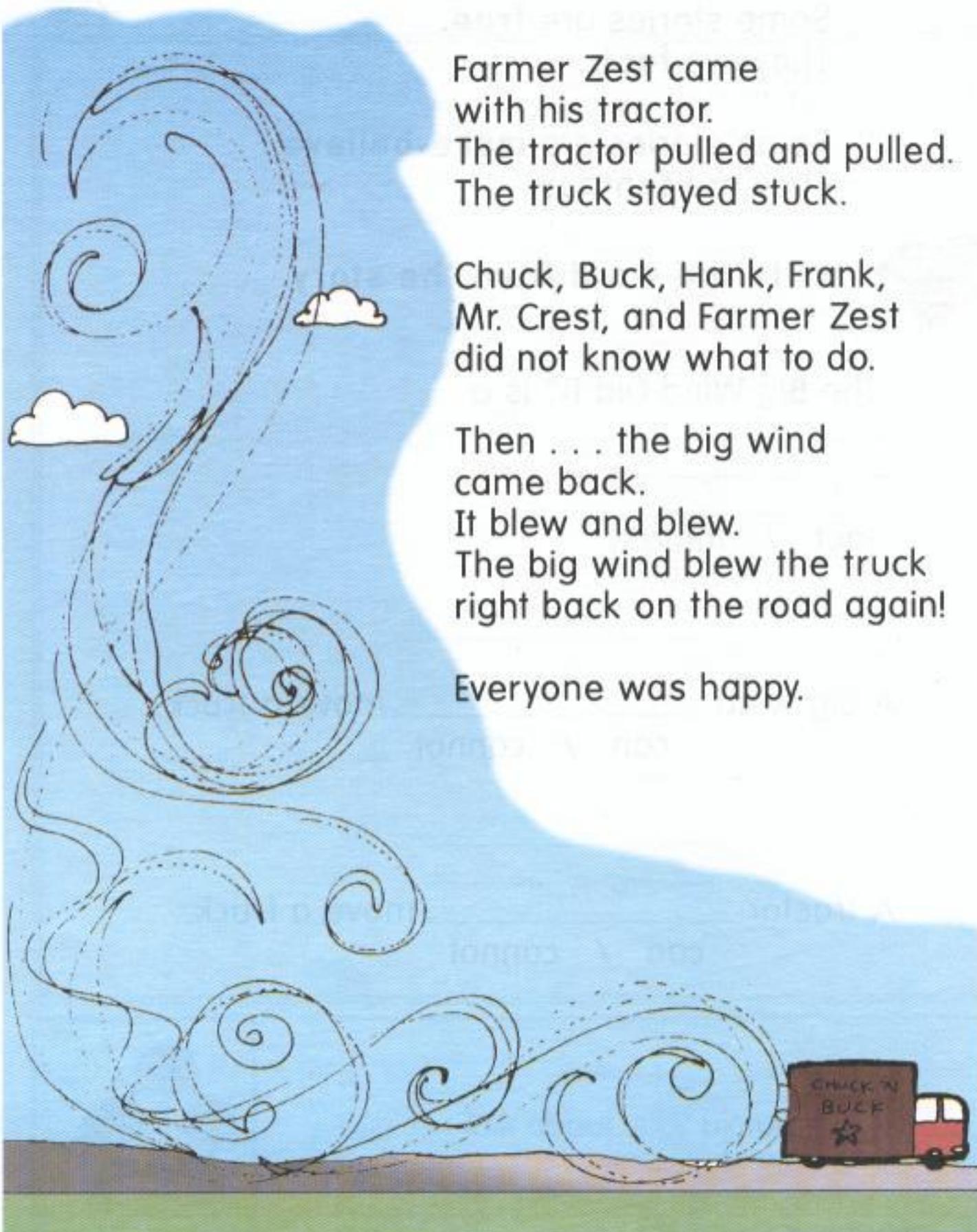
Hank and Frank tried to yank the stuck truck out of the mud.

The truck was still stuck.

"I know," said Mr. Crest.

"I will get Farmer Zest. He has a tractor."





Farmer Zest came  
with his tractor.  
The tractor pulled and pulled.  
The truck stayed stuck.

Chuck, Buck, Hank, Frank,  
Mr. Crest, and Farmer Zest  
did not know what to do.

Then . . . the big wind  
came back.  
It blew and blew.  
The big wind blew the truck  
right back on the road again!

Everyone was happy.

Some stories are **true**.

They are **fact**.

Some stories are **make-believe**.

They are **fantasy**.



**Write the word from the story.**

"The Big Wind Did It" is a

\_\_\_\_\_

-----

\_\_\_\_\_

fact / fantasy

A big wind \_\_\_\_\_ move a truck.

\_\_\_\_\_

-----

can / cannot

A tractor \_\_\_\_\_ move a truck.

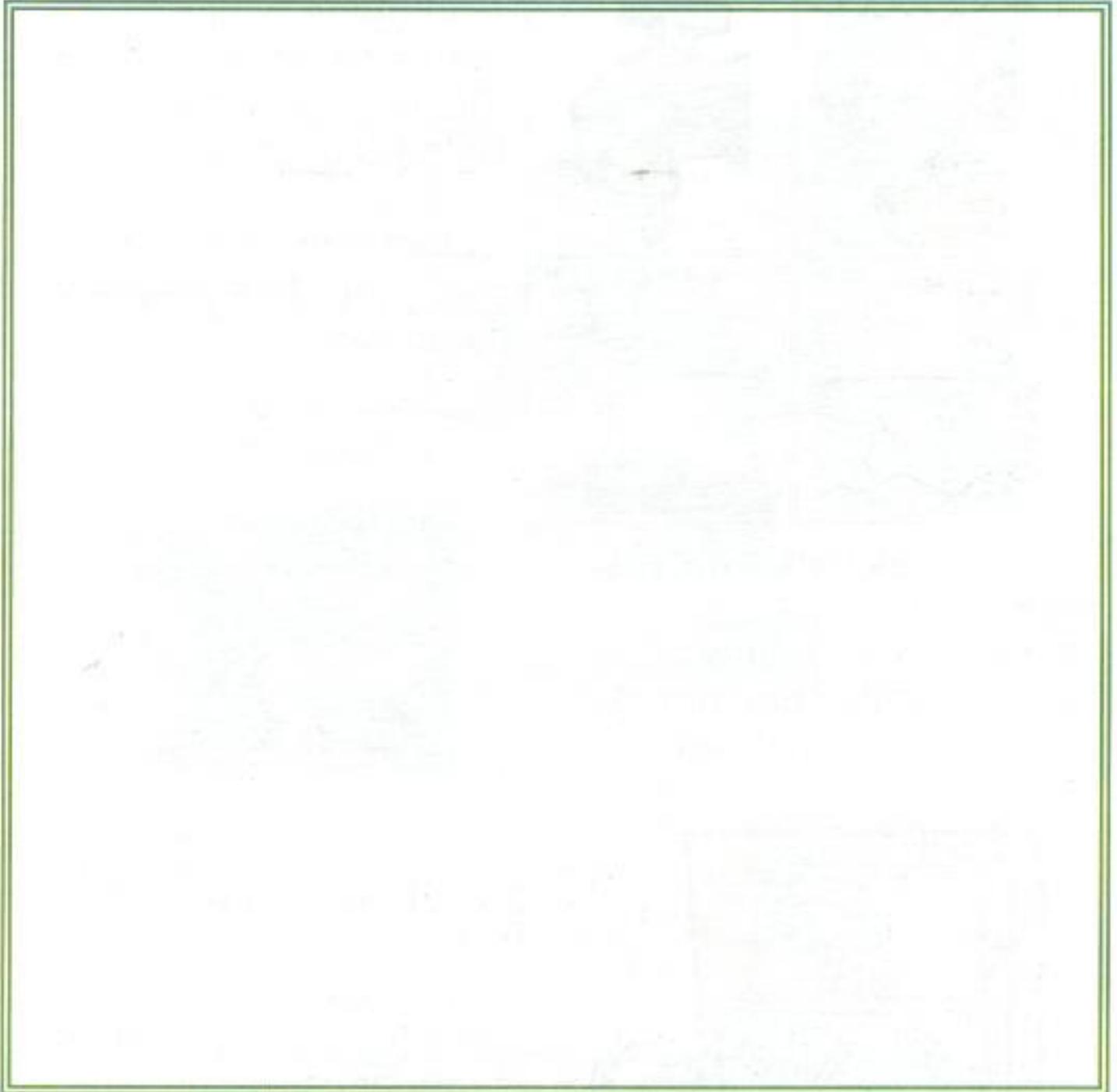
\_\_\_\_\_

-----

can / cannot

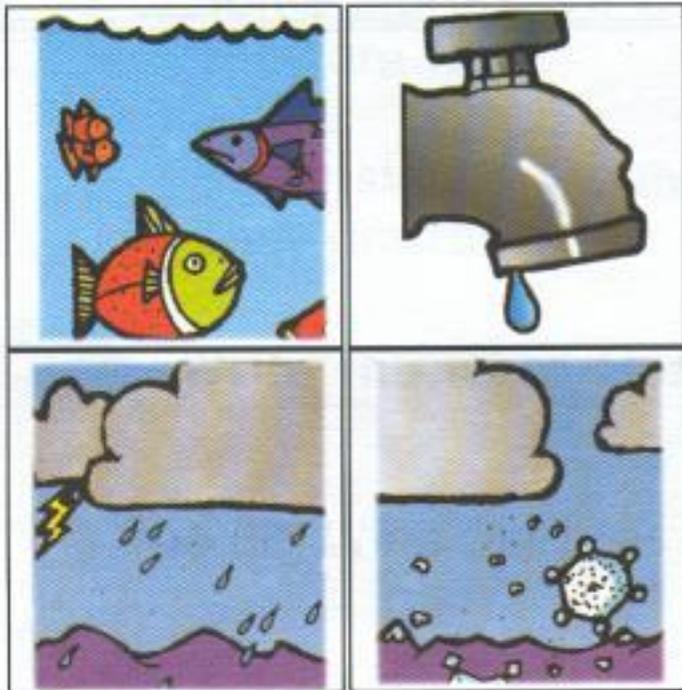


**Draw something you have seen the wind do.**



Talk about your picture.

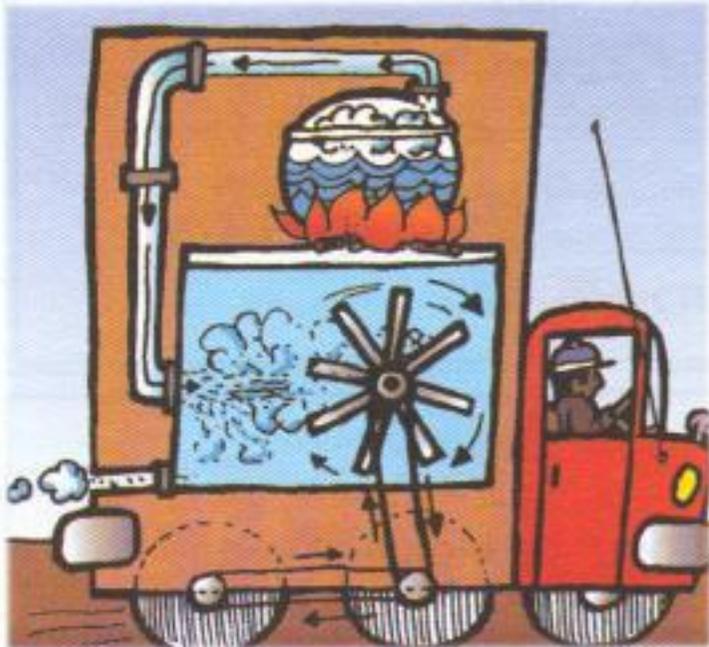
## WATER



God made water.  
We need water to drink.  
Plants need water to  
help them grow.

Sometimes water is still.  
Still water has no energy  
to do work.

Sometimes water moves  
very fast.  
Water moves things.  
Moving water has energy.



Sometimes water gets hot.  
It changes to steam.  
Steam has energy.  
Steam can drive engines.  
Steam engines can pull  
trains.

The sun helps water do its work.  
Every drop of water is used  
over and over again.



Where will the raindrop land  
the next time it comes?



**Make water work.**

**You need:**

|                |              |
|----------------|--------------|
| pan            | sand         |
| board          | small stones |
| glass of water | large stone  |



**Do these things. Check them.**

1. Look at the picture.
2. Make the pan and board look like Sunny's.
3. Put the stones and sand near the top of the board.
4. Pour the water down the board.
5. See what happens.



**Circle the answer.**

The sand \_\_\_\_\_.  
moved / stayed still

The little stones \_\_\_\_\_.  
moved / stayed still

The big stone \_\_\_\_\_.  
moved / stayed still



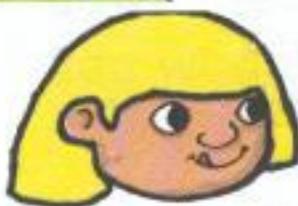
Match the word with the picture.



Sunny



wind



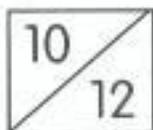
sun



Mr. Raindrop



steam



Teacher Check \_\_\_\_\_

Initial

Date



My Score



## II. WE USE ENERGY

God made the sun, wind,  
and water.  
He gave us their energy  
to use.

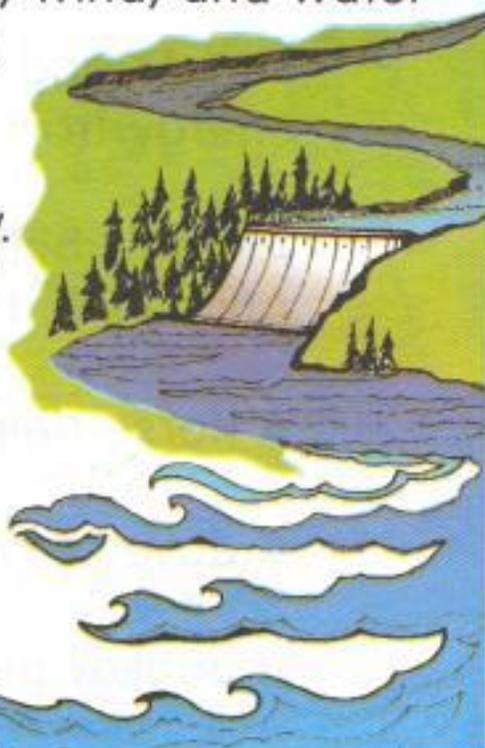
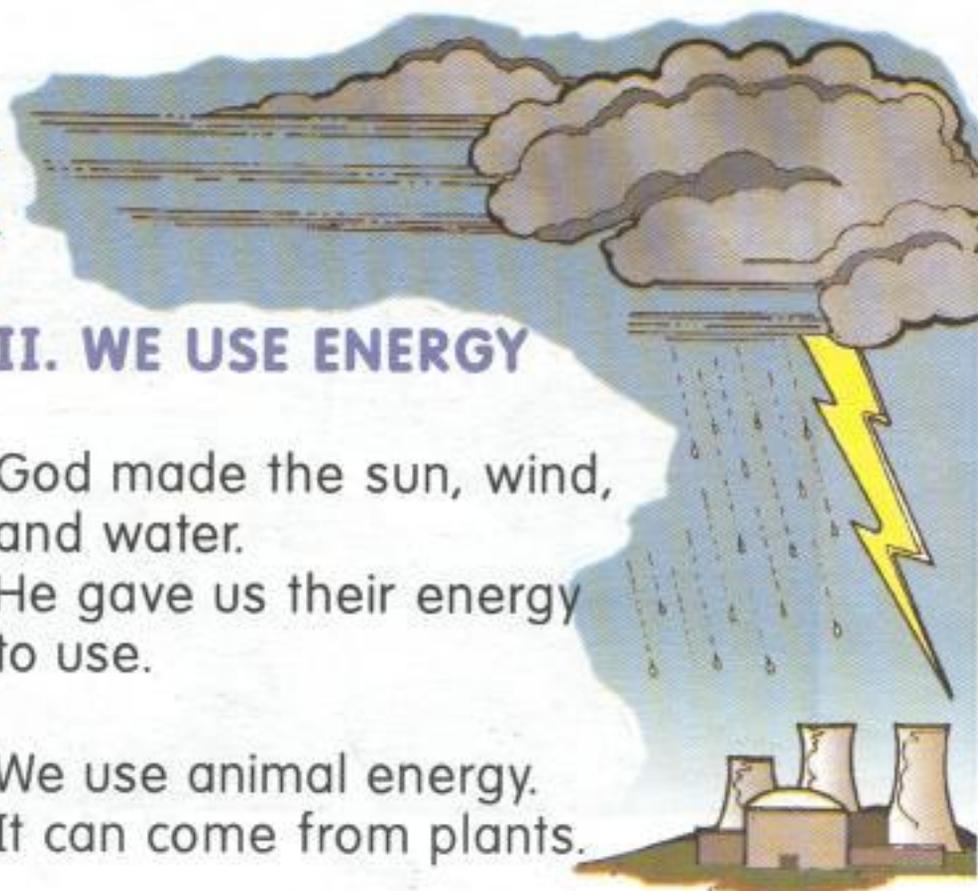
We use animal energy.  
It can come from plants.

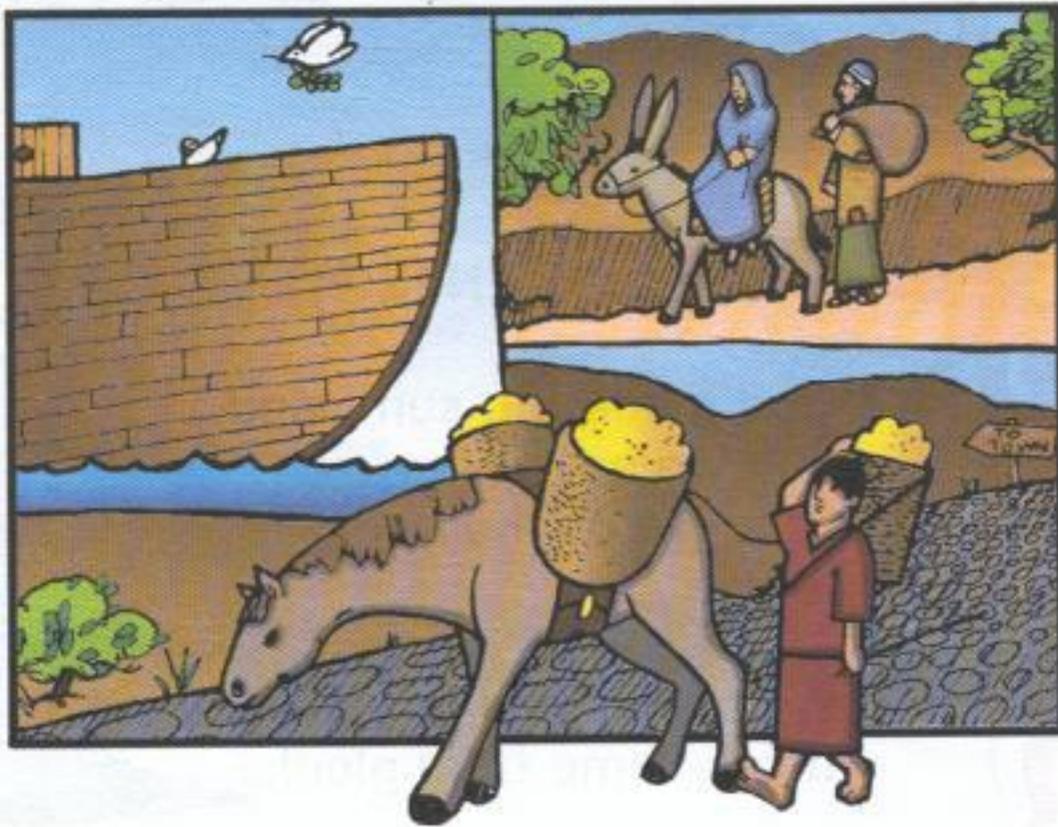
We use fuel energy.  
It comes from the sun.

Energy from the sun, wind, and water  
can make electricity.  
We use electricity.

We use solar energy.  
The sun can make  
heat and electricity.

We can use nuclear  
energy, too.





## WE USE ANIMALS

People and animals get energy from the food they eat.

Animals help people do work.  
Animals in the Bible helped.

A horse helps a farmer.

A dove helped Noah.

A donkey may have helped Mary.

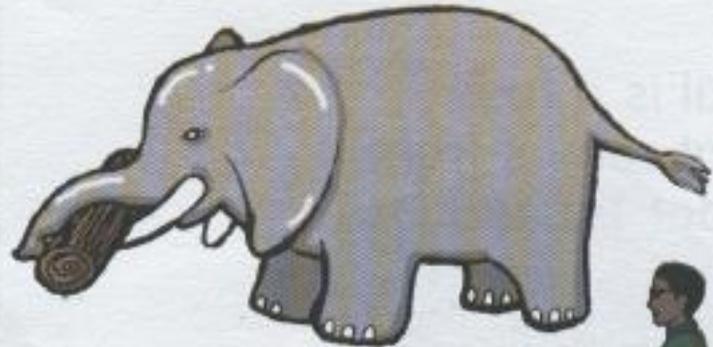


**Match the sentence to the picture.**

Elephants help.

Dogs help.

Cows help.



**Draw a picture of an animal helping.**



## WE USE FUELS

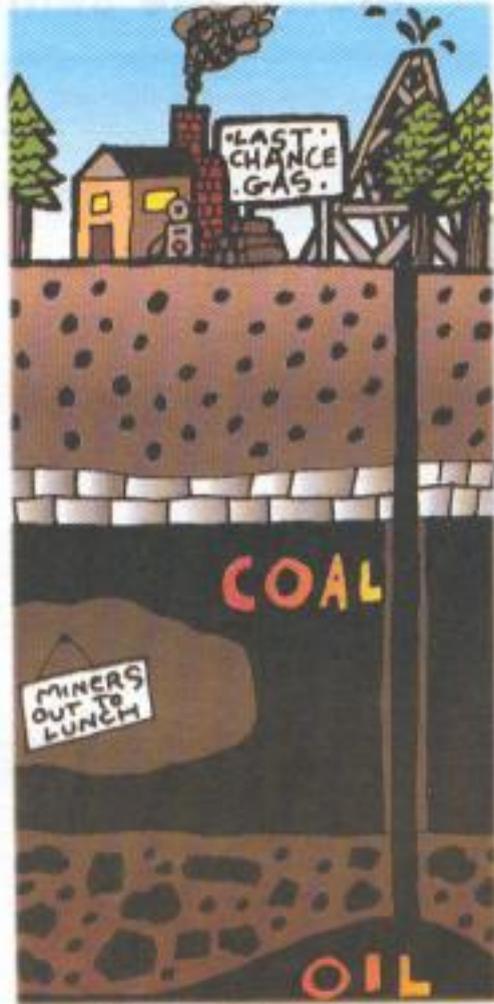
A fuel is something we burn to get energy.

Wood is a fuel.  
Wood is from a tree.

Coal is a fuel.  
Coal comes from under the ground.

Oil is a fuel.  
Oil is under the ground, too.

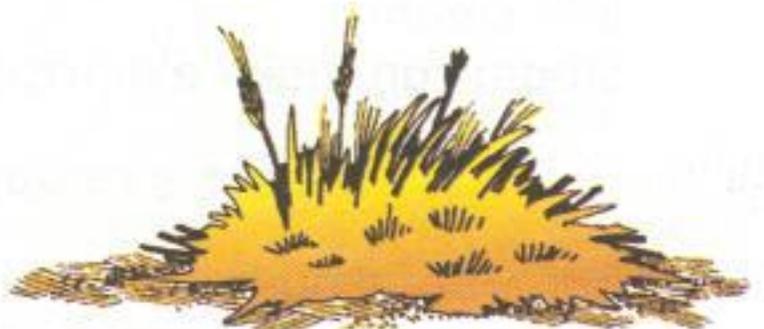
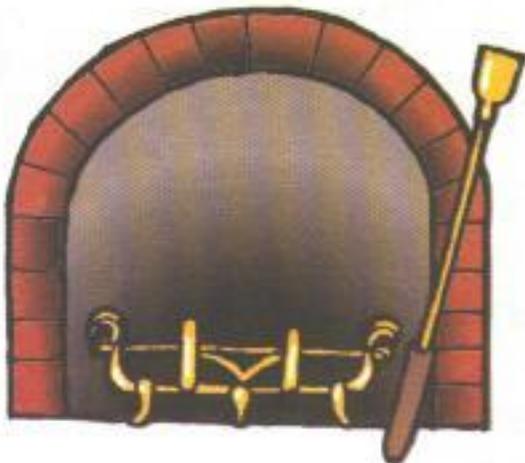
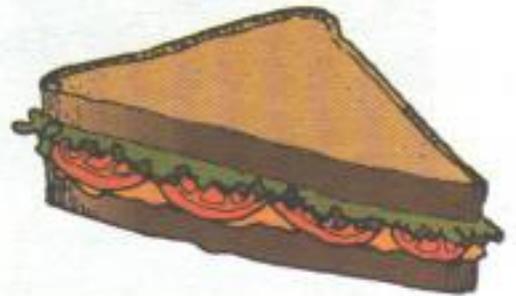
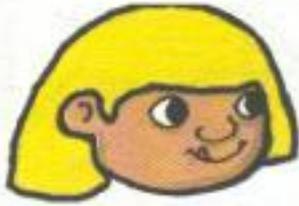
Gasoline is a fuel.  
Gasoline is made from oil.

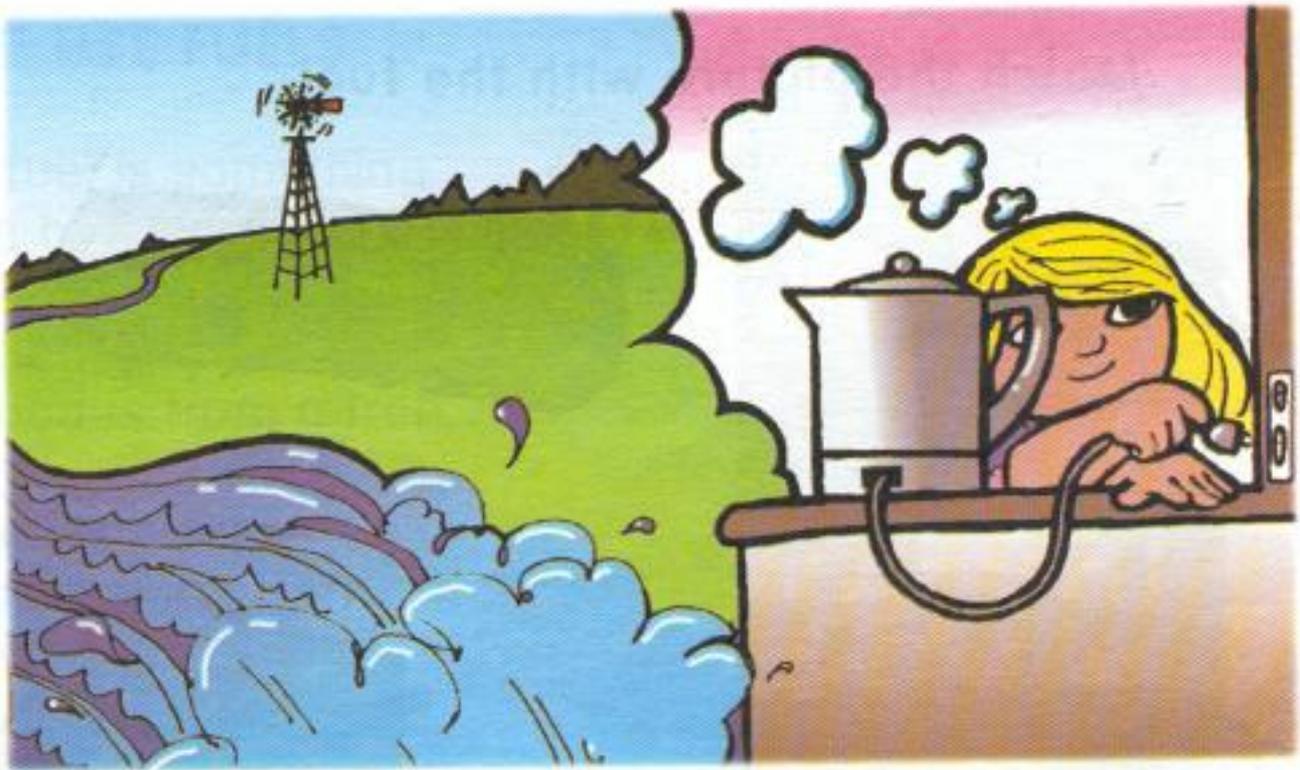


Food is a fuel, too.  
Animals need food.  
We need food.  
Food gives energy.



Match the picture with the fuel.





## WE USE ELECTRICITY

Electricity is important.  
Men make electricity  
from other kinds of energy.

Moving water  
can make electricity.

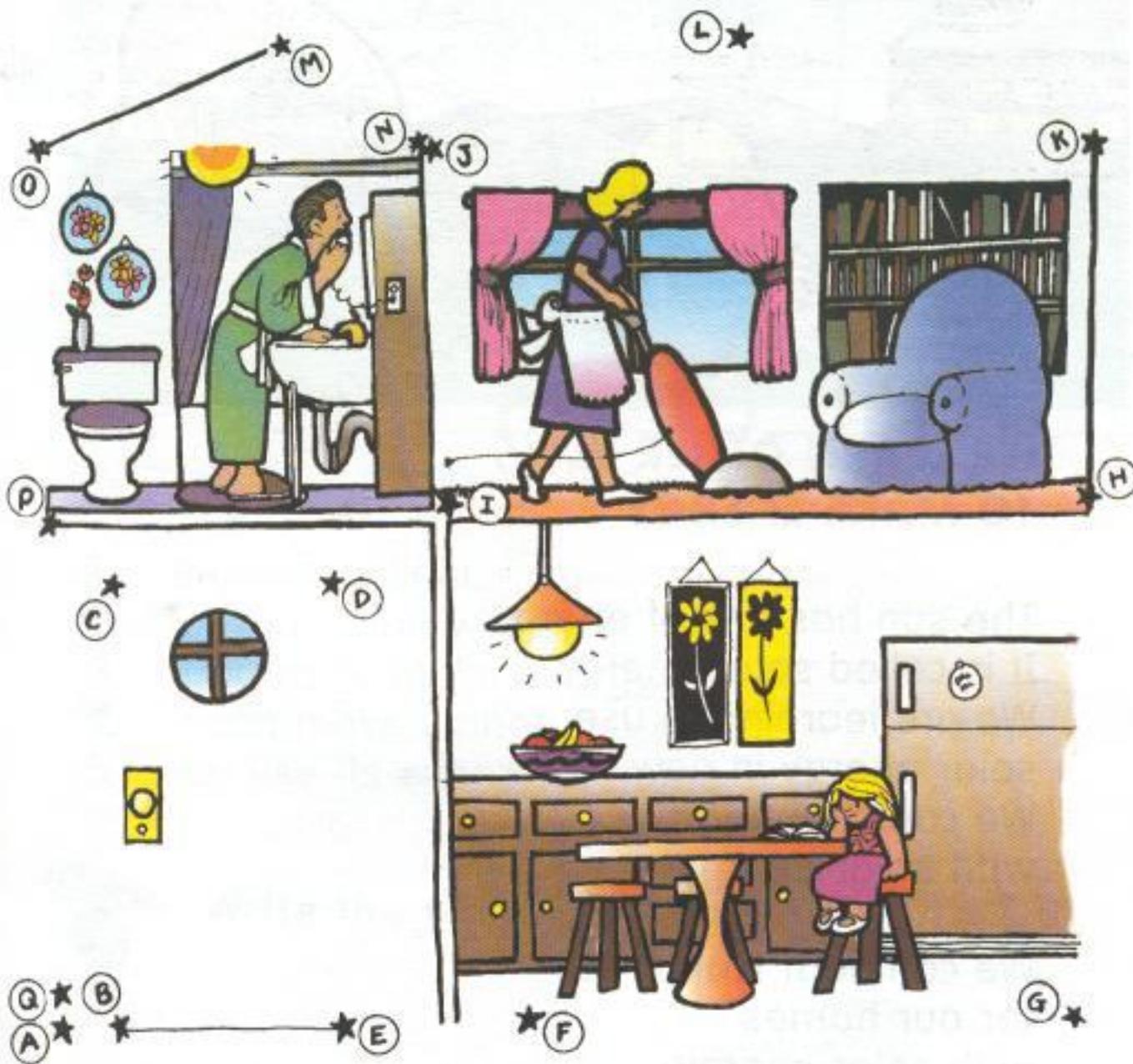
Wind can make electricity.

Burning fuel changes water  
into steam.  
Steam can make electricity.

# You Use Electricity



Follow the dots to see where you use electricity. Start at A.

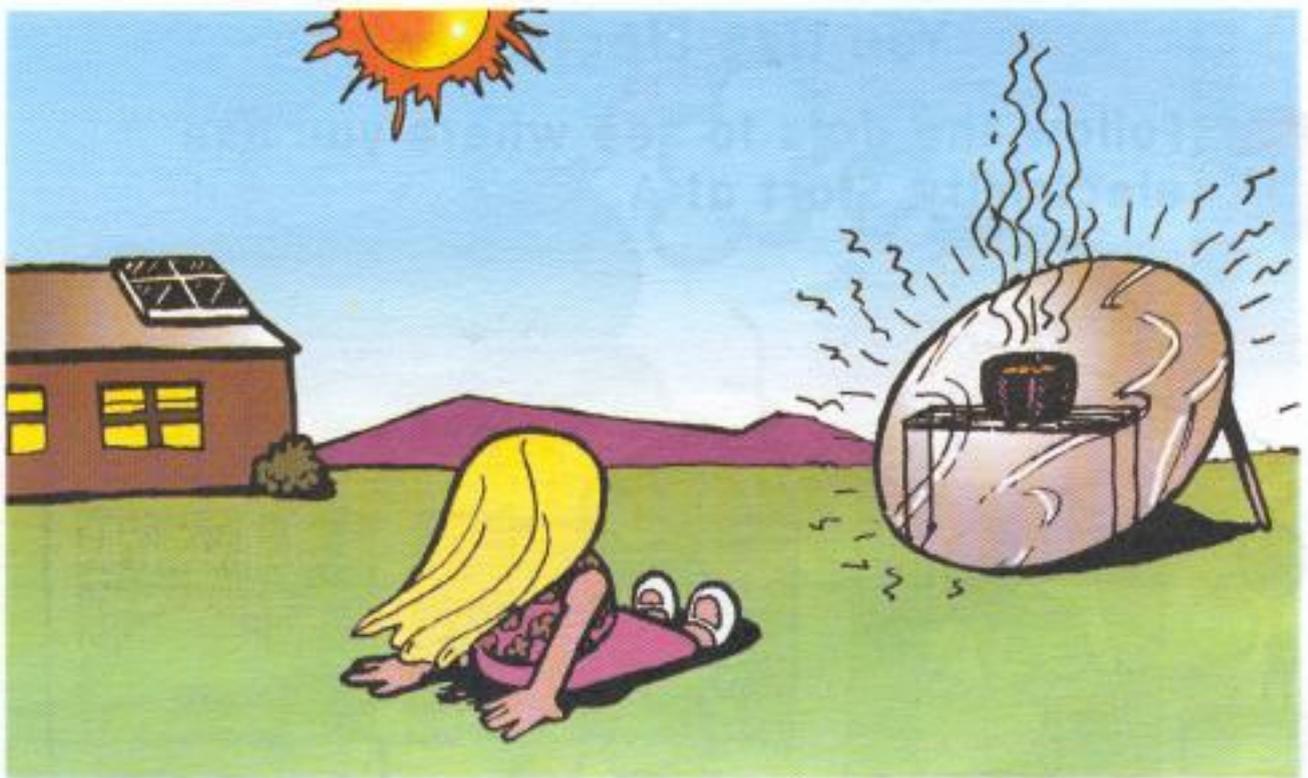


Circle other places you use electricity.

school

desert

church



## WE LEARN OTHER WAYS TO MAKE ENERGY

The sun has lots of energy.  
It is called solar energy.  
We are learning to use  
solar energy in new ways.  
We can cook food  
with solar energy.

We can heat water  
for our homes  
with solar energy.

Solar energy  
can make electricity, too.



**Put in the missing letters.  
Find a name for the sun's energy.**

|    |  |  |  |  |  |  |  |  |  |  |
|----|--|--|--|--|--|--|--|--|--|--|
| 1. |  |  |  |  |  |  |  |  |  |  |
| 2. |  |  |  |  |  |  |  |  |  |  |
| 3. |  |  |  |  |  |  |  |  |  |  |
| 4. |  |  |  |  |  |  |  |  |  |  |
| 5. |  |  |  |  |  |  |  |  |  |  |

1. It gives us light.
2. He made the world.
3. It burns to make energy.
4. It can move stones.
5. You use its energy at home.



**Write the word you found.**

---



---



---



**Write a sentence about solar energy in your Tablet.**



Look at these picture words.

They will help you read the story.  
It is about another kind of energy.

atom



magnifying glass



● dot



microscope

pencil



electricity



eye



scientist



Read this true story.



Some were trying to find out what things were made of.

First, they looked with their .

Then they looked with a .

Finally, they looked with a .

They found that things are made of very tiny parts. They called these parts .

An  is smaller than anything you can see or feel.

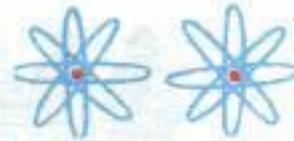
It is smaller than the tiniest

● you can make with your .

The



looked at



with a powerful



They tried to take



apart.

That was very hard to do.

One day a



did it.

He split an



When the



split,

it made a lot of heat energy.

Energy made this way  
is called nuclear energy.

Nuclear energy is powerful.

Nuclear energy can be

used to make





**Circle yes or no.**

An atom is big.

yes no

A scientist split an atom.

yes no

Energy from a split atom  
is nuclear energy.

yes no

The story of the atom is  
fact.

yes no



## SELF TEST 2

Match the sentence to the picture.

We use animals' energy.

We use solar energy.

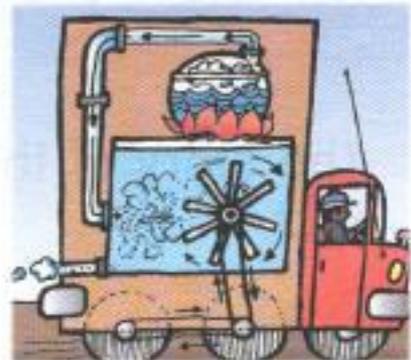
We use electricity.

We use fuels.

We use nuclear energy.

We use the wind's energy.

We use water energy.



**Circle the right words.**

Food is \_\_\_\_\_.  
a fuel / an energy

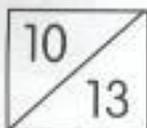
Energy from the sun, wind, and water can  
make \_\_\_\_\_.  
fuel / electricity

Sun energy is a gift from \_\_\_\_\_.  
a scientist / God

A scientist can \_\_\_\_\_ an atom.  
make / split

Energy that can cook food is \_\_\_\_\_  
energy.  
solar / nuclear

Energy made by splitting atoms is \_\_\_\_\_  
energy.  
solar / nuclear



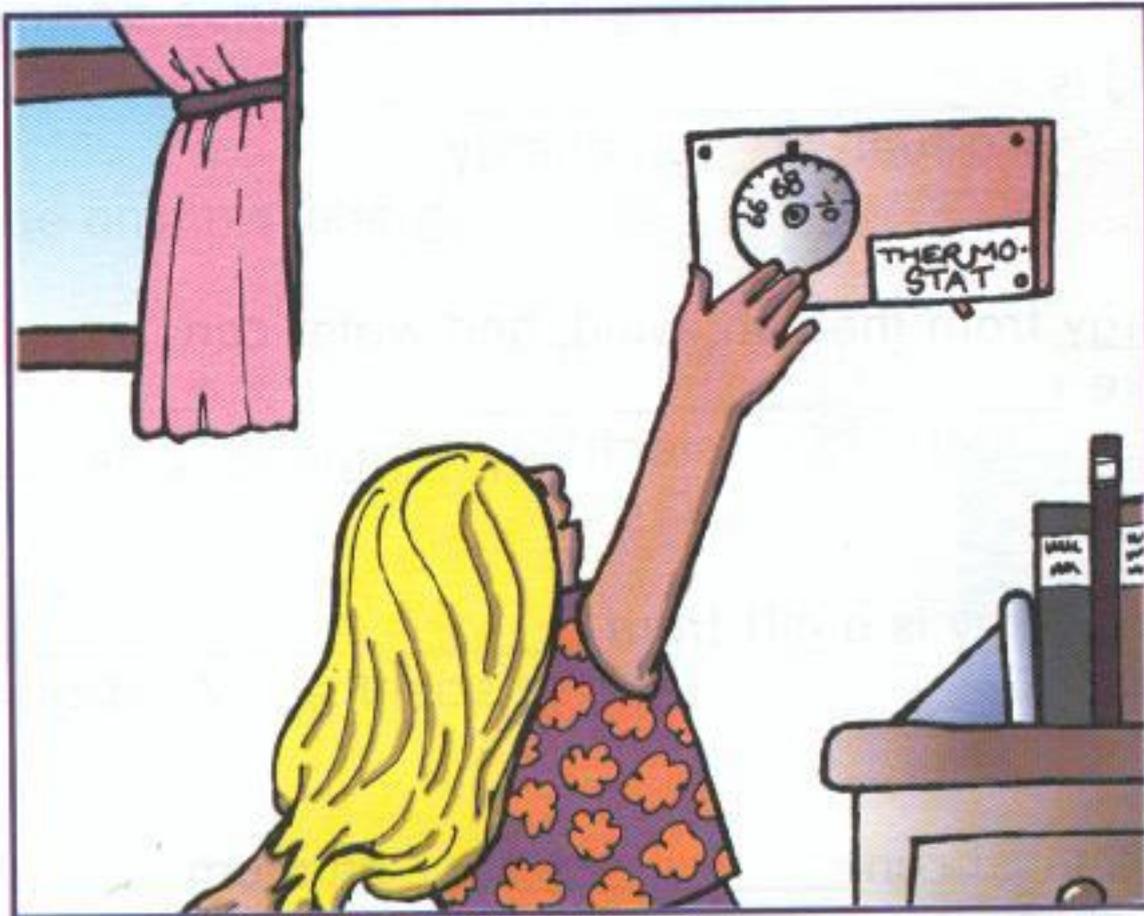
Teacher Check \_\_\_\_\_

Initial

Date



My Score



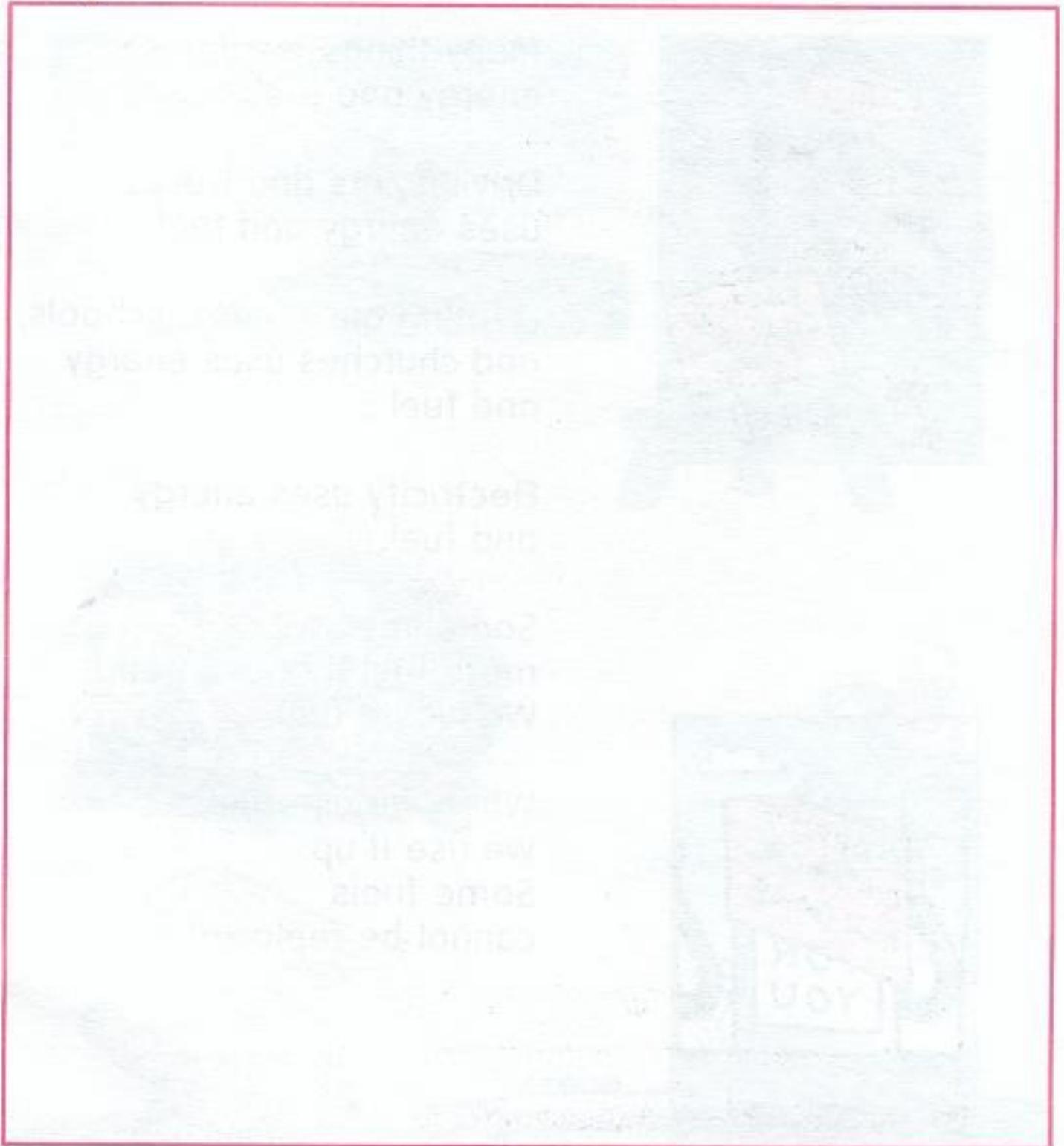
### III. WE SAVE ENERGY

God made the world.  
God wants us to take care  
of His world.

Sunny wants to help.  
How about you?

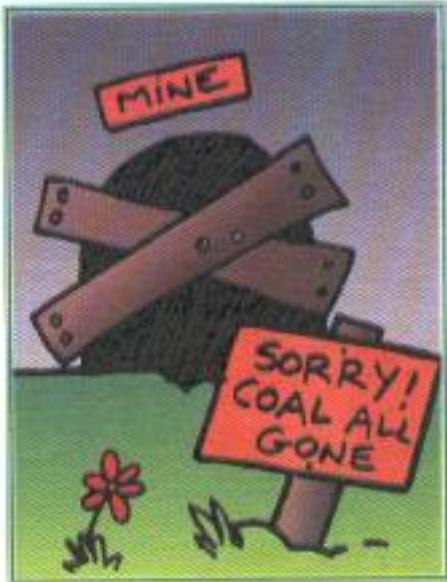


**Draw something you can do to save energy.**



**In your Tablet write a sentence telling how you can save energy.**

## WE WASTE FUEL



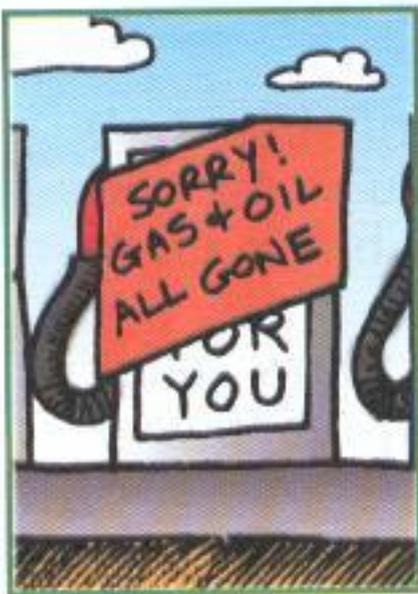
Many things we do use energy and fuel.

Driving cars and trucks uses energy and fuel.

Heating our homes, schools, and churches uses energy and fuel.

Electricity uses energy and fuel.

Sometimes we use more fuel than we need. We waste fuel.

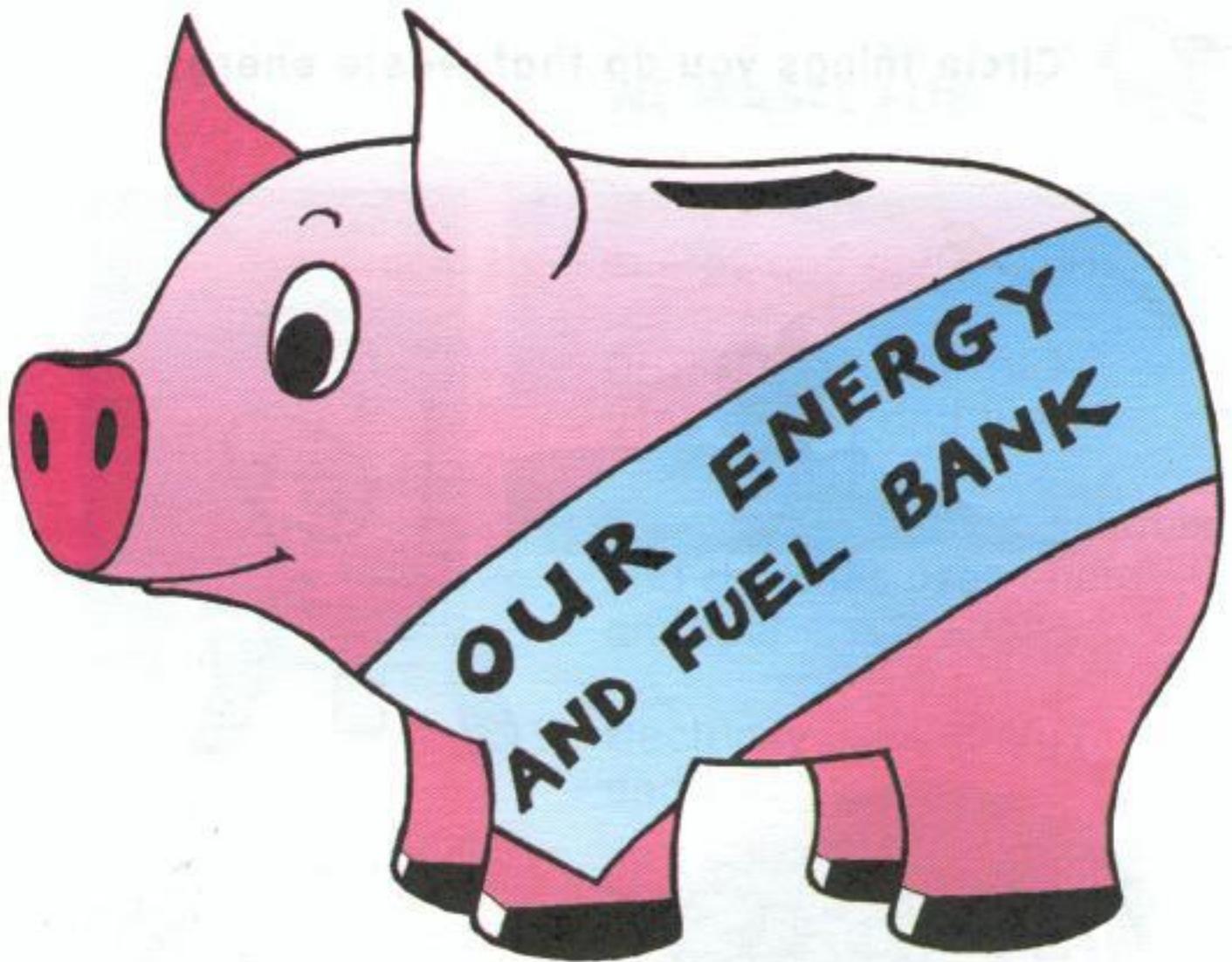


When we use fuel, we use it up. Some fuels cannot be replaced.



Circle things you do that waste energy.





## **WE CAN USE ENERGY WISELY**

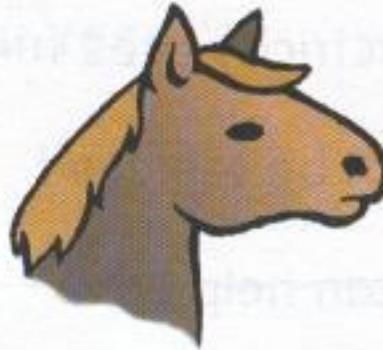
Saving energy saves fuel.  
Scientists can help.

Scientists can find  
new ways to make energy.  
Grown-ups can help.

**YOU CAN HELP!**



Put an X on each type of energy you should save.



Circle yes or no.

Fuel will never run out.  
yes / no

Electricity uses fuel.  
yes / no

The sun gives energy.  
yes / no



Teacher Check

Initial

Date

## SELF TEST 3

Circle yes or no.

Making electricity uses fuel. yes / no

All fuels can be replaced. yes / no

Scientists can help save energy. yes / no

God wants you to take care of His world. yes / no

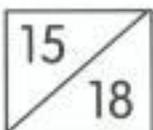
Can you help save energy? yes / no

Circle the names of things that give energy.

|       |        |             |
|-------|--------|-------------|
| car   | plant  | atom        |
| sun   | water  | electricity |
| stone | animal | fuel        |
| mud   | wind   | paper       |

Circle the names of things that use energy.

|        |       |       |
|--------|-------|-------|
| people | car   | plant |
| paper  | house | stove |



Teacher Check \_\_\_\_\_

Initial

Date



My Score

## TAKE HOME ACTIVITY

Make a poster for your room.



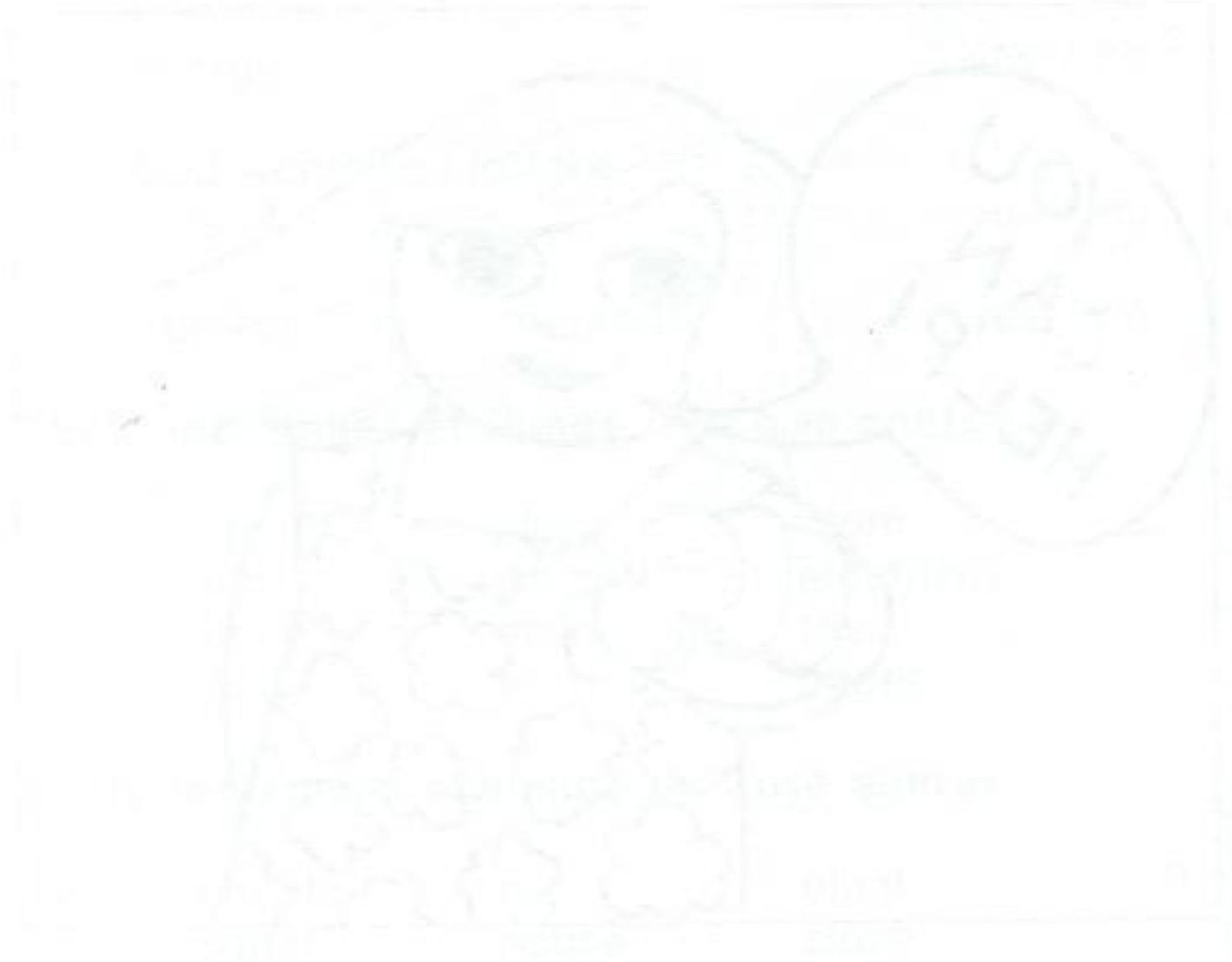
**Be an energy saver.**

# NOTES

Write on this

Always a poster for your room from the class

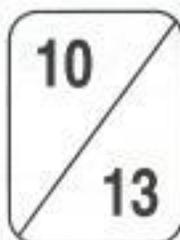
All the things you can do



# SCIENCE

1 0 8

## LIFEPAC TEST



Name \_\_\_\_\_

Date \_\_\_\_\_

Score \_\_\_\_\_

## SCIENCE 108: LIFE PAC TEST

Write the word on the line.

Solar energy comes from the \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

sun / water

Food is \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

an energy / a fuel

Moving air is \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

wind / work

Some \_\_\_\_\_ cannot be replaced.

\_\_\_\_\_

\_\_\_\_\_

water / fuels

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

wants you to save energy.

God's / God

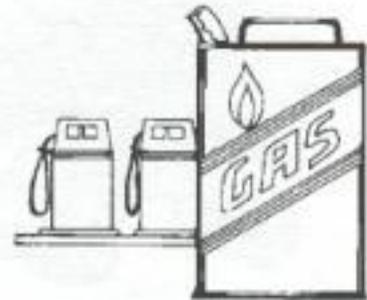
Using the \_\_\_\_\_ energy saves fuel.

\_\_\_\_\_

\_\_\_\_\_

sun / sun's

Match the picture with the fuel it uses.



Read the sentence. Circle fact or fantasy.

Scientists can split atoms.  
fact / fantasy

Trucks can fly.  
fact / fantasy

Draw two ways you can help save energy.

