BIG QUESTION 5

Where does energy come from?

Write three things that we use energy for every day.

_____, _____, _____

What kind of energy do these things use?

_____

Why is energy important?

_____

_____

_____

UNIT 9

Get Ready

Words

A Look and write.

electricity	coal	windmill	pollution	oil	power plant
sailboat	wind turbine	natural gas	wind farm		

1 

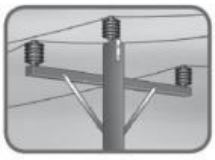
_____

2 

_____

3 

_____

4 

_____

5 

_____

6 

_____

7 

_____

8 

_____

9 

_____

10 

_____

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B Look and label.

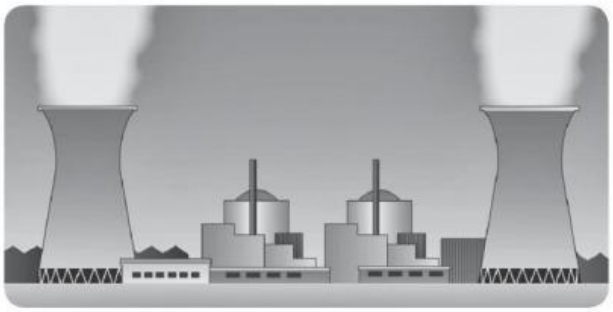
Forms of Energy	
Renewable	**Nonrenewable**
1  _____	4  _____
2  _____	5  _____
3  _____	6  _____

C Look and write.

1 A _____ uses the wind to move across the water.

2 We use _____ to light our homes.

3 Burning coal makes air _____.



4 We make energy in a _____.

Read

A **Read the article. What form of renewable energy is the article about?**

B **Read the article again. In your own words, say some of the advantages of using solar energy. Remember, repeating or putting new information into your own words will help you remember what you learn.**

Energy for Today: Solar Power

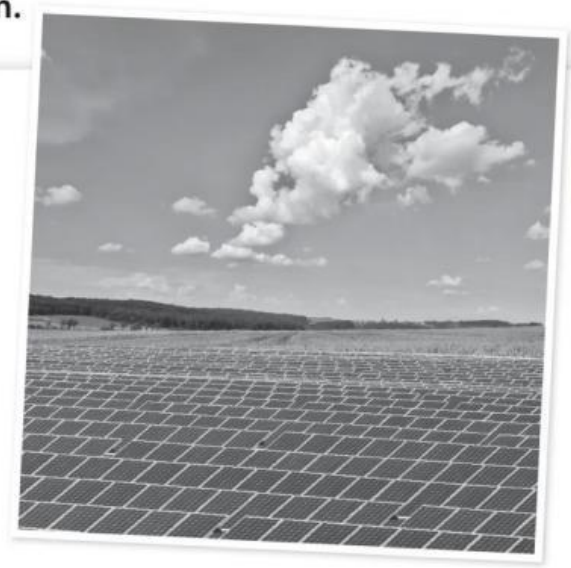
Solar energy comes from the sun. When the sun shines down on solar panels, the panels collect the power from the sun. Then the solar energy can be converted into other forms of energy, like heat and **electricity**. We can use solar energy to light our houses and run our appliances, such as refrigerators.

Solar energy is a renewable energy source because there will always be sunshine. Sunshine cannot get used up like **coal**, **oil**, or **natural gas**. And it doesn't cause air **pollution**. Just the opposite: We all enjoy a sunny day!

Think Put what you learned about solar energy in your own words.

The sun could make enough energy for all of our needs, but the sun does not always shine. We cannot get much solar energy when it is dark or cloudy. So it's important to be able to store solar energy to use when we need it.

Solar thermal **power plants** can store solar energy. First, the solar panels collect energy from the sun and turn it into heat.



This is called thermal energy. We can use this thermal energy to make steam. Then the steam is used to run a generator. The generator makes electricity. We can use the electricity right away or store it for use at a later time.

How much solar energy might we need to make enough electricity for everyone? If we cover only a small area of the world's deserts with solar panels, we could make enough electricity for everyone in the world. Just the Gobi Desert could make almost all the electricity that the world uses today.

Think Write or say what you learned from the text in your own words.

Comprehension

A What are some of the good things about solar energy?

_____

_____

B Answer the questions.

1 What types of energy can solar power make?

_____

_____

_____

_____

2 How do we make solar thermal power? Number the sentences in order.

- ☐ **a** The generator makes electricity.
- ☐ **b** Heat, or thermal energy, makes steam.
- ☐ **c** Solar panels collect energy and turn it into heat.
- ☐ **d** The steam runs a generator.

C **Words in Context** Complete the sentences with the words in the box.

nonrenewable	fossil fuels	source	renewable

1 Oil and coal are _____.

2 Fossil fuels are _____ resources.

3 The sun and wind are _____ resources.

4 Wind power is a clean _____ of energy.

D **About You** Answer the questions.

1 What types of energy do you use in your home?

_____

2 What types of energy do you use in your school?

_____

Grammar in Use

A Study the grammar.

Learn Grammar *May* and *Might*

It **may be** sunny tomorrow.

This ball **might be** less expensive than that one.

We **might have** time to play.

We **may not have** enough juice.

B Look at the picture. Circle the correct answers.

1 It **may** / **may not** rain today.

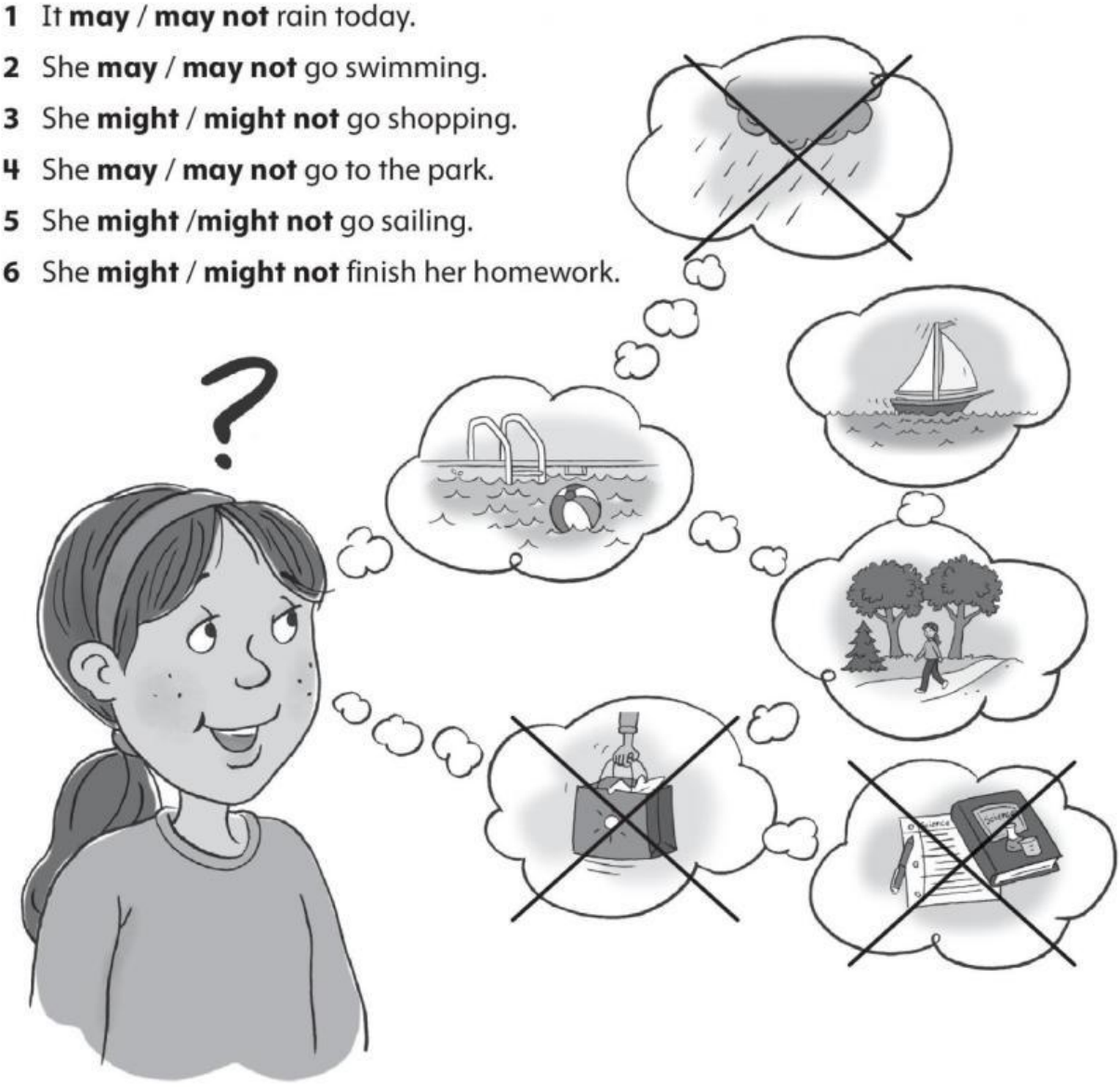
2 She **may** / **may not** go swimming.

3 She **might** / **might not** go shopping.

4 She **may** / **may not** go to the park.

5 She **might** /**might not** go sailing.

6 She **might** / **might not** finish her homework.



C Complete the sentences with the phrases in the box.

may not run out	may be	might make	may have
might not be able to	might hurt		

1 One day, wind power _____ enough energy for everybody.

2 We _____ of fossil fuels in the next ten years.

3 We _____ store solar energy without a power plant.

4 We _____ a cleaner planet if we use renewable energy.

5 Solar power _____ more important than natural gas one day.

6 Wind turbines _____ the birds.

D Complete the sentences with *may*, *might*, *may not*, or *might not*.

1 There _____ be enough solar power for everybody.

2 There _____ be any gas in twenty years.

3 We _____ be able to collect much solar energy today.

4 We _____ get a lot of electricity from the wind.

E Write about what you might do this weekend. Use *may* or *might*, and *may not* or *might not*.

1 _____

2 _____

Communicate

Word Study

plant conserve harvest shield harm waste

A Z

A **Label the pictures. Then match the antonyms.**

1 _____ • • a _____

2 _____ • • b _____

3 _____ • • c _____

B **Complete the sentences with the words from the box above.**

1 We _____ fuel when we take the bus to school.

2 The farmer will _____ the apple seeds tomorrow.

3 Some people use sunglasses to _____ their eyes from the sun.

4 We can _____ the apples in the fall.

5 Looking into the sun can _____ your eyes.

6 Water is precious. Don't _____ it!

Writing Study

A **Complete the chart. Write the words in the correct columns.**

Count Nouns	Noncount Nouns

energy	windmill
resource	power plant
turbine	natural gas
heat	solar panel
power	electricity

B **Write about one type of energy.**

Read the example. Use **may**, **might**, **may not**, or **might not** in your writing. Remember to use the correct singular or plural verb for count and noncount nouns.
For example:

a turbine is ...
turbines are ...
energy is ...

> **Solar energy is** a renewable energy resource. It is good for our environment. **Solar panels are** used to collect power from the sun. Solar power can give us electricity. It can also give us heat. Someday, we **may** get all of our energy from the sun.