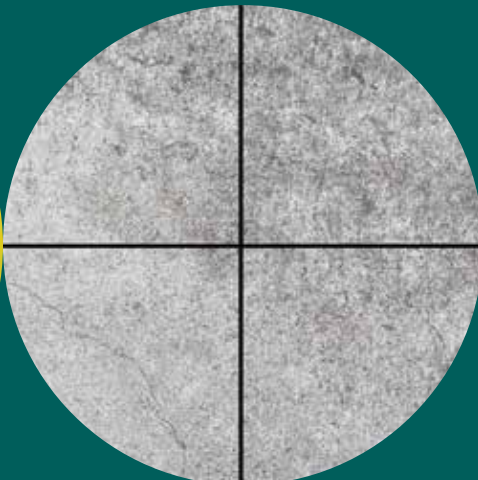


# Teaching Activities Renewable or Nonrenewable Resources



wood blocks



stone tiles



chicken nuggets



aluminum cans



rubber tire



wood lumber

# Table of Contents

---

- 3 How to Use This Activity Guide (General)
- 4 What Do Children Already Know?
- 5 Pre-Reading Questions
- 6 Comprehension Questions & Writing Prompts
- 7 Fill in the Conjunction-English
- 8 Language Arts: Sequence Sentence Strips
- 9 True or False?
- 10 Appendix A—"What Children Know" Cards
- 11 Appendix B—Venn Diagram

Copyright 2023 © Arbordale Publishing

These activities may be copied for  
personal and non-commercial use in  
educational settings.

[www.ArbordalePublishing.com](http://www.ArbordalePublishing.com)

Arbordale Publishing  
Mt. Pleasant, SC 29464



# How to Use This Activity Guide (General)

---

There are a wide variety of activities that teach or supplement all curricular areas. The activities are easily adapted up or down depending on the age and abilities of the children involved. And, it is easy to pick and choose what is appropriate for your setting and the time involved. Most activities can be done with an individual child or a group of children.

**For teachers in the classroom:** We understand that time is at a premium and that, especially in the early grades, much time is spent teaching language arts. All Arbordale titles are specifically selected and developed to get children excited about learning other subjects (science, geography, social studies, math, etc.) while reading (or being read to). These activities are designed to be as comprehensive and cross-curricular as possible. If you are teaching sentence structure in writing, why not use sentences that teach science or social studies? We also know and understand that you must account for all activities done in the classroom. While each title is aligned to all of the state standards (both the text and the For Creative Minds), it would be nearly impossible to align all of these activities to each state's standards at each grade level. However, we do include some of the general wording of the CORE language arts and math standards, as well as some of the very general science or social studies standards. You'll find them listed as "objectives" in italics. You should be able to match these objectives with your state standards fairly easily.

**For homeschooling parents and teachers in private schools:** Use as above. Aren't you glad you don't have to worry about state standards?

**For parents/caregivers:** Two of the most important gifts you can give your child are the love of reading and the desire to learn. Those passions are instilled in your child long before he or she steps into a classroom. Many adults enjoy reading historical fiction novels . . . fun to read but also to learn (or remember) about historical events. Not only does Arbordale publish stories that are fun to read and that can be used as bedtime books or quiet "lap" reading books, but each story has non-fiction facts woven through the story or has some underlying educational component to sneak in "learning." Use the "For Creative Minds" section in the book itself and these activities to expand on your child's interest or curiosity in the subject. They are designed to introduce a subject so you don't need to be an expert (but you will probably look like one to your child!). Pick and choose the activities to help make learning fun!

**For librarians and bookstore employees; after-school program leaders; and zoo, aquarium, nature center, park & museum educators:** Whether reading a book for story time or using the book to supplement an educational program, feel free to use the activities in your programs. We have done the "hard part" for you.

# What Do Children Already Know?

Young children are naturally inquisitive and are sponges for information. The whole purpose of this activity is to help children verify the information they know (or think they know) and to get them thinking “beyond the box” about a particular subject.

Before reading the book, ask the children what they know about the subject. A list of suggested questions is below. The children should write down their “answers” (or adults for them if the children are not yet writing) on the chart found in Appendix A, index cards, or post-it notes.

Their answers should be placed on a “before reading” panel. If doing this as a group, you could use a bulletin board or even a blackboard. If doing this with individual children, you can use a plain manila folder with the front cover the “before reading” panel. Either way, you will need two more panels or sections—one called “correct answer” and the other “look for correct answer.”

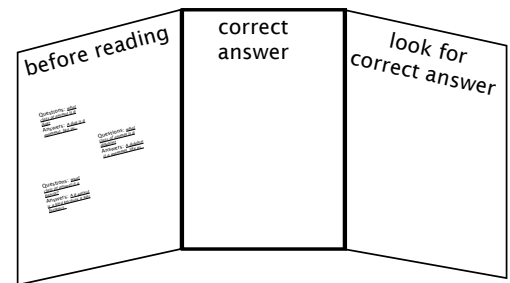
Do the children have any more questions about the subject? If so, write them down to see if they are answered in the book.

After reading the book, go back to the questions and answers and determine whether the children’s answers were correct or not.

If the answer was correct, move that card to the “correct answer” panel. If the answer was incorrect, go back to the book to find the correct information.

If the children have more questions that were not answered, they should look them up.

When an answer has been found and corrected, the card can be moved to the “correct answer” panel.



# Pre-Reading Questions

---

1. What are natural resources?
2. Can they define/explain what it means for a natural resource to be renewable?
3. How do some of these renewable resources renew themselves?
4. Can they think about how long it might take for resources to renew?
5. Can they define/explain what a non-renewable resource is?
6. Have children list natural resource, then have them categorize whether they think the resources are renewable or non-renewable.
7. Can they explain why they sorted things into the column?
8. Ask children if they think renewable resources can ever become non-renewable. Have them explain their thinking.
9. What are some reasons a “renewable” resource may become non-renewable in certain areas?

## Example List of Potential Natural Resources

air  
animals  
minerals  
natural gas  
oil  
plants  
rocks  
soil  
sunlight  
water

# Comprehension Questions & Writing Prompts

---

*Explain major differences between books that tell stories and books that give information*

*Identify basic similarities in and differences between two texts on the same topic.*

*Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.*

1. What's the commonly accepted time frame to consider that something is considered renewable?
2. What are some natural resources that farmers help "renew?"
3. Where do we get some of the animal resources we use?
4. How long can it take the Earth to make some of the non-renewable resources we use?
5. What are some non-renewable resources we use?
6. Where do we find/get some of these non-renewable resources?
7. Where does coal come from and how do we get it?
8. What is it called when we drill into the Earth and use high pressure to push water, sand, and chemicals into the Earth to make new pathways to get oil and gas out more efficiently?
9. What are some concerns that some people have about the method described in question 8?
10. What are some benefits of the method described in question 8?
11. What are some of the natural resources we use to make electricity?
12. What are some nonrenewable resources that we can recycle?
13. What are some things humans might do to cause a renewable resource in an area to become nonrenewable?

# Fill in the Conjunction-English

---

*Objective Core Language Arts: Use frequently occurring conjunctions.*

Use one of the following words to fill in the sentence so that it makes sense.

and

but

or

so

because

Plants, animals, air, sunlight, water, soil, oil, natural gas, coal, rocks,  
\_\_\_\_\_ are all natural resources.

Living things are renewable resources \_\_\_\_\_ they make more of themselves.

Renewable resources are easily made and replaced within a period of time usually shorter than a person's lifetime \_\_\_\_\_ nonrenewable resources cannot be easily replaced as it takes much longer than a human lifetime to make new.

We use three main nonrenewable fossil fuels for energy: coal, oil, \_\_\_\_\_ natural gas.

We drill and quarry to find \_\_\_\_\_ use these resources.

When coal is heated in a special manner, it makes a fuel called coke \_\_\_\_\_ that is not like the cola drink.

Fracking makes it less expensive for us to heat our homes \_\_\_\_\_ some people are concerned that it may cause earthquakes.

Most cars run on gasoline that comes from nonrenewable oil drilled out of the ground \_\_\_\_\_ some now run on electric batteries.

We get electricity from coal, sunlight (solar), water, heat from the earth (geothermal), \_\_\_\_\_ wind.

Plastic is made from oil drilled out of the ground \_\_\_\_\_ you can recycle it.

Water is a renewable resource \_\_\_\_\_ it recycles itself through the water cycle.

# Language Arts: Sequence Sentence Strips

---

Cut into sentence strips, laminate if desired, and place in a “center.” Have children put the events in order. Children may work alone or in small groups. Cards are in order but should be mixed up when cut apart.

*Objective Core Language Arts:*

*Use temporal words and phrases to signal event order.*

*Describe the overall structure of a story, including describing how the beginning introduces the story and the ending concludes the action.*

Coal is a sedimentary rock formed over millions of years from decaying plant material.

Coal is mined.

Nonrenewable coal is crushed and burned.

As the coal burns, it creates steam that allows generators to make electricity.

Coal can also be heated in a special manner to make a high-carbon fuel called “coke.”

The coke is used to make steel and iron ore.





# True or False?

---

*Objective: Critical thinking skills*

Circle whether you think the statement is true or false. If false, can children explain what the true statement would be?

1. T/F Everything we make or use comes from some kind of natural resource.
2. T/F Natural resources are considered renewable if they renew themselves in 10 years or less.
3. T/F Resources are considered nonrenewable if it take them more than 25 years to renew themselves.
4. T/F Renewable resources are never at risk of disappearing.
5. T/F Coal mining is tough, dirty work that can be dangerous.
6. T/F When coal is heated in a special manner, we get coke that is used to make steel and iron ore.
7. T/F Fracking make it less expensive for us to heat our homes and for energy we use.
8. T/F Most cars run on gasoline that comes from renewable oil drilled out of the ground.
9. T/F Even if something is nonrenewable, we can reuse or recycle it.
10. T/F Plastic is made from oil drilled out of the ground.
11. T/F If groundwater is removed faster than it can be replaced, it can run out in that area.
12. T/F If we use renewable resources faster than they can renew, they can become nonrenewable in that area.

# Appendix A—“What Children Know” Cards

---

<p>Question:</p>          <p>My answer:</p>          <p>This information is correct! This information is not correct; can you find the correct information?</p>	<p>Question:</p>          <p>My answer:</p>          <p>This information is correct! This information is not correct; can you find the correct information?</p>
<p>Question:</p>          <p>My answer:</p>          <p>This information is correct! This information is not correct; can you find the correct information?</p>	<p>Question:</p>          <p>My answer:</p>          <p>This information is correct! This information is not correct; can you find the correct information?</p>

# Appendix B—Venn Diagram

