



Teaching Activity Guide
for
Clouds

A Compare and Contrast Book

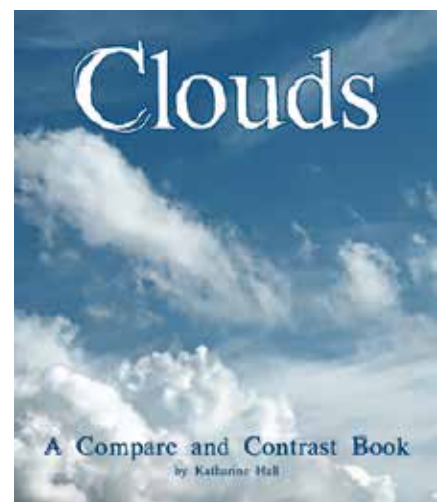
by Katharine Hall

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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.

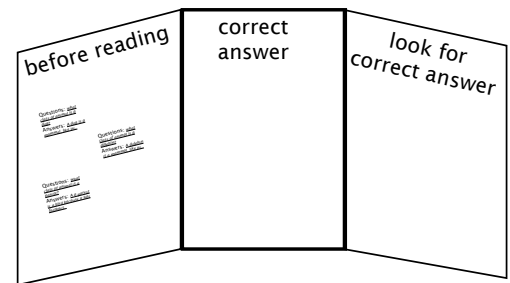
What Do Children Already Know?

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—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

What are clouds?

What are some words you can use to describe clouds?

How do clouds look on a day with good weather?

How do clouds look on a stormy day?

Where are clouds?

Comprehension Questions & Writing Prompts

Can you name any different kinds of clouds.

Look outside and describe any clouds you see. If there are no clouds, describe the sky.

Think of two different clouds that you have seen, or two different clouds in the sky now. Describe how they are alike and how they are different.

Draw a cloud. What kind of cloud is it?

Can you draw each of the different kinds of clouds?

What are the different stages of the water cycle?

Pretend you are a droplet of water. Describe what happens to you as you go through the water cycle.

Word Search

Find the hidden words. Even non-reading children can match letters to letters to find the words! Easy—words go up to down or left to right (no diagonals). For older children, identify the coordinates of the first letter in each word (number, letter).

| | A | B | C | D | E | F | G | H | I | J |
|----|---|---|---|---|---|---|---|---|---|---|
| 1 | C | A | P | F | R | N | S | T | U | O |
| 2 | B | S | K | Y | O | K | Y | F | C | R |
| 3 | L | B | I | G | W | S | T | O | F | I |
| 4 | U | H | O | G | E | N | Q | G | L | W |
| 5 | E | C | L | O | U | D | E | R | U | T |
| 6 | Y | M | E | R | S | S | X | K | F | C |
| 7 | D | H | O | P | E | N | W | O | F | M |
| 8 | A | R | A | I | N | O | B | O | Y | J |
| 9 | N | G | I | R | L | W | A | T | E | R |
| 10 | W | I | S | P | Y | C | U | R | L | Y |

CLOUD
FLUFFY
FOG
RAIN
SKY
SNOW
WATER

Science Journal (Vocabulary)

Cloud

my definition

my drawing

Sky

my definition

my drawing

Evaporate

my definition

my drawing

Rain

my definition

my drawing

Math: Measuring Cloud Cover

Sometimes there is not a single cloud in the sky. Other times, clouds cover the entire sky! Scientists need a way to describe “cloud cover,” or how much of the sky is covered by clouds.

Cloud cover is always written as a fraction in eighths. If you look up in the sky and think that about half of the sky is covered by clouds, that would be described as “ $4/8$ cloud cover.”

Meteorologists (scientists who study weather) describe cloud cover using by using a fraction in eights. $0/8$ means there are no clouds in the sky. $4/8$ means half the sky is covered in clouds. $8/8$ means the whole sky is covered in clouds.

Look at the fractions below and reduce the fractions where you can.

1. There are no clouds in the sky today. $0/8$ cloud cover.
2. There are a few clouds in the sky. $1/8$ cloud cover.
3. A quarter of the sky is covered by clouds. $2/8$ cloud cover.
4. There are clouds covering more than a quarter of the sky. $3/8$ cloud cover.
5. Half sky sky is visible. The other half is covered in clouds. $4/8$ cloud cover.
6. More than half the sky has clouds. $5/8$ cloud cover.
7. Most of the sky is covered in clouds. Only a quarter of the sky is visible. $6/8$ cloud cover.
8. It is very cloudy. Only a small portion of the sky is visible. $7/8$ cloud cover.
9. The entire sky is covered in clouds. $8/8$ cloud cover.

Math Cards

Objective Core Mathematics Classify objects into given categories; count the numbers of objects in each category and sort the categories by count. (up to 10)

Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.

Use numbers, up to 10, to place objects in order, such as first, second, and third, and to name them

For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation.

Math Card Games


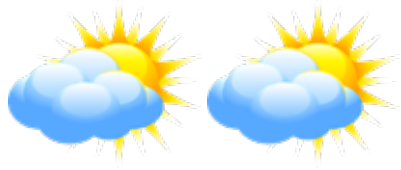





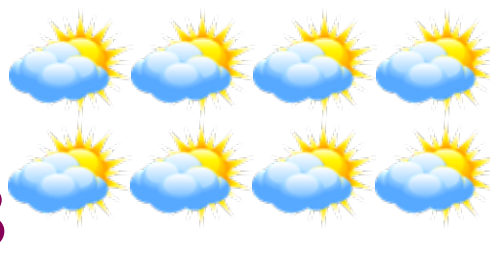
(Make four copies of the math cards to play these games):

Tens Make Friends Memory Game is a combination of a memory and adding game.

- Play like the memory game, above.
- If the animal numbers add up to 10, the child keeps the pair and takes another turn.
- If they do not add up to ten, the player should turn the cards back over and it is another player's turn.

Go Fish for Fact Families is a twist on "Go Fish."

- Shuffle cards and deal five cards to each player. Put the remaining cards face down in a draw pile.
- If the player has three cards that make a fact family, he/she places them on the table and recites the four facts related to the family. For example, if someone has a 2, 3, and 5, the facts are: $2 + 3 = 5$, $3 + 2 = 5$, $5 - 2 = 3$, $5 - 3 = 2$.
- The player then asks another player for a specific card rank. For example: "Sue, please give me a 6."
- If the other player has the requested card, she must give the person her card.
- If the person asked doesn't have that card, he/she says, "Go fish."
- The player then draws the top card from the draw pile.
- If he/she happens to draw the requested card, he/she shows it to the other players and can put the fact family on the table. Otherwise, play goes to the next person.
- Play continues until either someone has no cards left in his/her hand or the draw pile runs out. The winner is the player who then has the most sets of fact families.

| | |
|---|--|
| <p>1 </p> | <p>2 </p> |
| <p>3 </p> | <p>4 </p> |
| <p>5 </p> | <p>6 </p> |
| <p>7 </p> | <p>8 </p> |

9 

Answers

| | A | B | C | D | E | F | G | H | I | J |
|----|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | |
| 2 | | S | K | Y | | | | F | | |
| 3 | | | | | | | | O | | |
| 4 | | | | | | | | G | | |
| 5 | | C | L | O | U | D | | | | |
| 6 | | | | | | S | | | | |
| 7 | | | | | | N | | | | |
| 8 | | R | A | I | N | O | | | | |
| 9 | | | | | | W | A | T | E | R |
| 10 | | | | | | | | | | |

| | |
|--------|-----|
| CLOUD | 5,B |
| FLUFFY | 3,I |
| FOG | 2,H |
| RAIN | 8,B |
| SKY | 2,B |
| SNOW | 6,F |
| WATER | 9,G |

Reduce the fractions where you can.

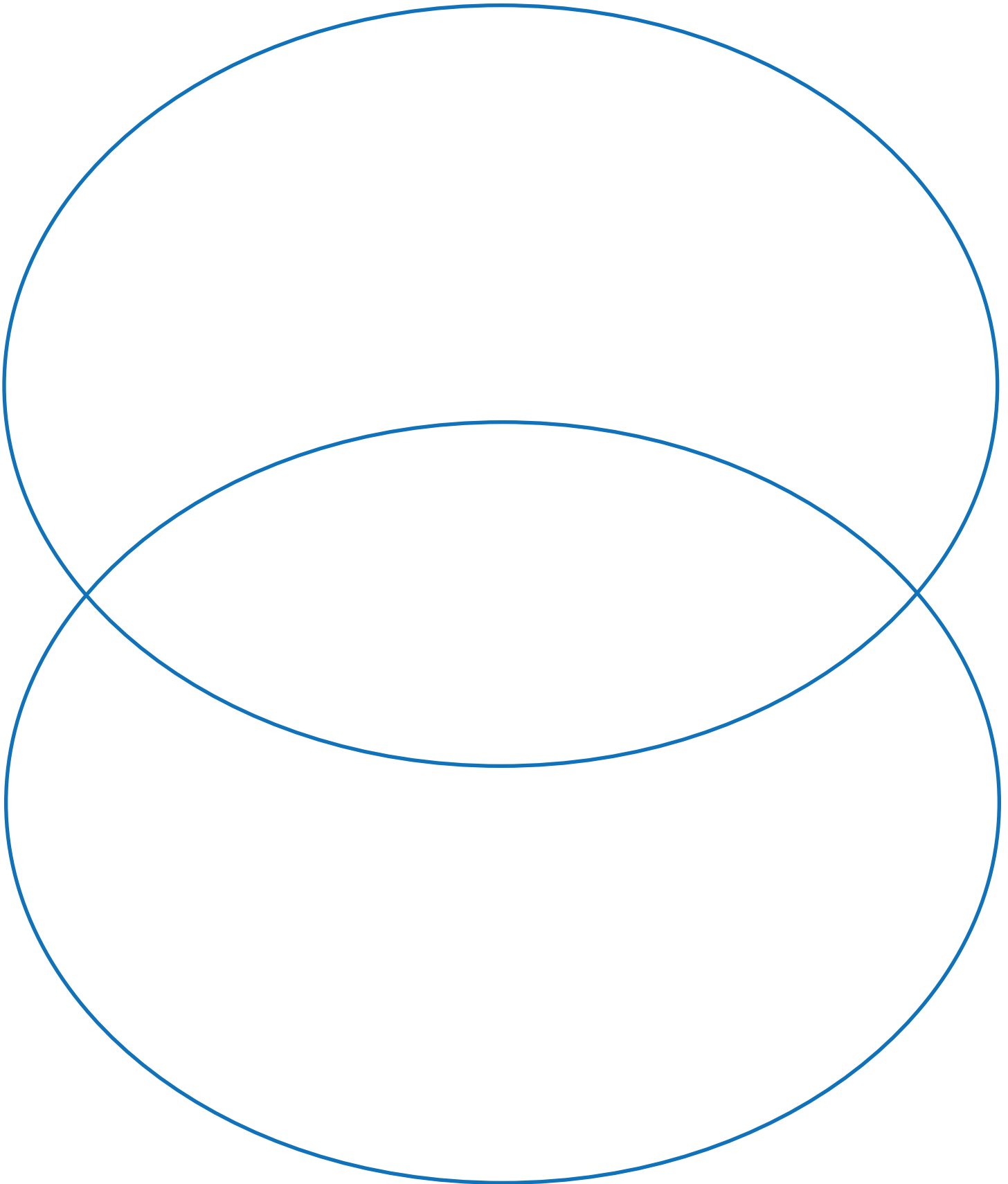
1. There are no clouds in the sky today. $0/8 = 0$
2. There are a few clouds in the sky. $1/8$
3. A quarter of the sky is covered by clouds. $2/8 = 1/4$
4. There are clouds covering more than a quarter of the sky. $3/8$
5. Half sky sky is visible. The other half is covered in clouds. $4/8 = 1/2$
6. More than half the sky has clouds. $5/8$ cloud cover.
7. Most of the sky is covered in clouds. $6/8 = 3/4$
8. It is very cloudy. Only a small portion of the sky is visible. $7/8$
9. The entire sky is covered in clouds. $8/8 = 1$

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

Compare and contrast two clouds



Appendix C—Vocabulary Cards

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