Power Packet 4
Let’s explore!

Fun learning activities for K-5th Grade!

SUMMER LEARNING
VOLUME 2

Arkansas PBS
Welcome, friends! We're glad you are joining us for our “Rise and Shine” learning adventure! We have a lot of fun learning planned and some great teachers leading us along the way. This Power Packet contains lots of different lessons and activities for you to choose from. You can also access more “Rise and Shine” fun on our website!

Visit myarkansaspbs.org/riseandshine for mini lessons with some of Arkansas’s best teachers, video field trips to interesting places all around our state, cool new songs and dance videos, and more!

¡Este paquete también está disponible en español!

myarkansaspbs.org/riseandshine/es

POWER PACKET GUIDE:

- Kids in K-2nd Grade – Start on Page 3
- Parents & Caregivers of K-2nd Grade Kids – Start on Page 7
- Kids in 3rd-5th Grade – Start on Page 9
- Parents & Caregivers of 3rd – 5th Grade Kids – Start on Page 13
- “Helping All Learners” – Page 15 (myarpbs.org/helpinglearners)
Math Power Page (K-2)

**Power Goal:** Use < (less than), = (equal to), and > (greater than) as a strategy for understanding place value.

**Learning Choices:**
While camping you notice lightning bugs flying around the campfire. You decide to catch a few lightning bugs. Read the numbers or solve the number sentences on each lightning bug. Using the information below, color each lightning bug to match the correct jar.

<table>
<thead>
<tr>
<th>Lightning bugs that are &lt; (less than) 10: Color in blue to match the blue jar.</th>
<th>Lightning bugs that are = (equal to) 10: Color in yellow to match the yellow jar.</th>
<th>Lightning bugs that are &gt; (greater than) 10: Color in green to match the green jar.</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. 2</td>
<td>B. 10</td>
<td>C. 10 + 2</td>
</tr>
<tr>
<td>D. 5 + 5</td>
<td>E. 18</td>
<td>F. 7 + 2</td>
</tr>
<tr>
<td>G. 9 + 1</td>
<td>H. 2 + 1</td>
<td>I. 10 + 5</td>
</tr>
</tbody>
</table>

**Science Power Page (K-2)**

**Power Goal:** Understand that all plants and animals have needs that allow them to grow, change, and survive.

**Learning Choices:**
1. Plants and animals need certain things to survive. Look at the question in each row. If the answer is yes, put a ✓ in the correct column. Sometimes both columns can have a ✓.

<table>
<thead>
<tr>
<th>Do they . . .</th>
<th>Plants</th>
<th>Animals</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. need sunlight?</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>B. need water?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. need air?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D. get food from other living things?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E. produce their own food?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F. move from place to place without help?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. One day your plant looked healthy, and a few days later it looked unhealthy. Explain what your plant could need to be healthy again.

<table>
<thead>
<tr>
<th>Day 1</th>
<th>Day 5</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Healthy Plant" /></td>
<td><img src="image2.png" alt="Unhealthy Plant" /></td>
</tr>
</tbody>
</table>

I think . . .

Possible answers: “It does have enough sunlight,” or “It does not have enough water.” Answers: 1A – both; D – both; E – animals; F – animals, F – animals, 2.
Power Goal: Decode words with common prefixes.

Learning Choices:
A root word is a word without a prefix or a suffix. Another word for root word is base word. A prefix is a letter or group of letters added before a root (base) word. When a prefix is added to a root word, the prefix changes the meaning of the word.

Prefix and Meaning | Root Word | New Word | Definition
--- | --- | --- | ---
pre- : before | dawn | predawn | before dawn
re- : back or again | pack | repack | to pack again
un- : not or opposite of | tie | untie | to undo something tied

1. Study the table above
Choose the best word from the “New Word” column to complete the sentences in the story below. The first one has been done for you. Each word will be used only once.

Dakota is leaving predawn for her trip. Getting ready, she has packed too much. She has to **un**- **tie** her bag to make everything fit. She is also bringing her fishing pole. The last time she fished, she had to **re**- **pack** her fishing hook because it was too loose. This trip will be so much fun!

2. Using the table in #1 as an example, complete the table below. Fill in the “New Word” and “Definition” columns with the correct words and definitions. Add these words to the story in Learning Choice 1, or use all the words to create your own story.

Prefix and Meaning | Root Word | New Word | Definition
--- | --- | --- | ---
dis- : not | obey | | 

mis- : bad or wrong | place | | 

Answers: 1. Repack; untie 2. disobey; not obey; misplace; wrong place
**Power Goal:** Talk about the purposes of a government.

**Learning choices:**
What is the purpose of a government? One purpose of the government is to help us stay safe. Our community has many helpers who do that.

Complete each sentence stem by writing what each helper does to keep us safe. Color each picture.

A. A firefighter keeps us safe by ___________
   _________________________________
   _________________________________

B. A police officer keeps us safe by ______
   _________________________________
   _________________________________

C. A paramedic helps us by ______________
   _________________________________
   _________________________________

D. An animal control officer helps us by
   _________________________________
   _________________________________
   _________________________________

Possible answers: A. putting out fires; B. protecting us from danger; C. giving first aid; D. rescuing animals.
**Parent/Caregiver Plan**

**Math (K-2)**

**Power Goal:** Use < (less than), = (equal to), and > (greater than) as a strategy for understanding place value.

**Shine and Share:** Ask your child if 8 is on the left of (less than) 10 or is on the right of (greater than) 10? Since 8 is on the left, and less than, your learner would say, “8 is less than 10.” In math, this sentence is written as, \(8 < 10\).

**Learning Choices:** Using the strategy above, prompt your child to use the number line and complete this sentence out loud or on paper: “___ is ___ than 10.” Instead of coloring the lightning bugs, your child can write the matching letter of the lightning bug underneath the correct jar.

**Rad Review:** Using the number cards in a deck of cards, have your child choose two cards and set them next to each other. Then ask them to complete this sentence “____ is (less than, equal to, or greater than) ______.” Check their work and repeat. For more practice with less than, equal to, and greater than, have your learner look at the back cover of this Power Packet labeled “Helping All Learners,” and find the tips for math. Follow this link to additional resources Power Packet Helping All Learners (https://bit.ly/3a7T5CV).

**Science (K-2)**

**Power Goal:** Understand that all plants and animals have needs that allow them to grow, change, and survive.

**Shine and Share:** Ask your child to list some living things in their environment. Examples are people, pets, insects, and plants. Ask your child to think about what those things need to grow and survive. Encourage your learner to think deeper than food and water.

**Learning Choices:**
1. Use the following prompt to help your child think about each question, “Do plants/animals need _____ to survive?”
2. Have your child look back at the plant column in the chart to help them get some ideas. Also, remind them that not all the things a plant needs are listed on the chart.

**Rad Review:** Set up your own scientific investigation. You will need beans, soil, and two clear plastic cups. The beans can be from a seed packet or from a bag of dry beans from the store. Plant two beans in each cup, and give them both the same amount of water. Label the cups #1 and #2. Decide what you want to test – one gets water, and one does not; one gets sunlight, and one does not. Or, come up with your own idea!
Parent/Caregiver Plan

Literacy (K-2)

**Power Goal:** Decode words with common prefixes.

**Shine and Share:** Did you know that the most commonly used prefixes are *re-*, *un-*, *dis-*, and *in-*? Look through books or magazines and make a list of prefixes to use in conversation with your child and others.

**Learning Choices:**
1. As you are helping your child with each word, try this strategy to help with meaning. Take the definition and use it in place of the word in the sentence. Does it make sense? If yes, then you have chosen the correct word. If not, try again until the meaning makes sense. In the example, if *re-* was used as the prefix, the word would be *redawn*. *Re-* means “back” or “again.” The meaning “dawn again” does not make sense.
2. Help your child think of other words with the prefixes “dis” and “mis,” and think of a definition for each word. Try to use those words when talking with your child and have them explain their meaning to you. Ask “Does this word match its definition?”

**Rad Review:** Mix up the prefixes and root words or base words from the charts in the Learning Choices to discover six different words, such as “preheat,” “recount,” and “unfair.” To see a visual of how some prefixes are used, follow the link [The un People: buttoned/unbuttoned](https://bit.ly/3ytLnfN).

Social Studies (K-2)

**Power Goal:** Talk about the purposes of a government.

**Shine and Share:** The government has many purposes: to keep us safe, to enforce the law, to keep the peace, and to defend our country from attack. Talk with your child about some of the things that your local, county, state, and federal governments do to make our lives better.

**Learning Choices:** Encourage your child to come up with ways that community helpers keep us safe. Children may be unsure how these workers help us, so some explanation may be necessary. Ask, “How does each worker keep us safe?” For example, a paramedic may bandage an injured person’s wounds or give medicine to someone being driven to the hospital in an ambulance. An animal control officer might rescue a pet caught in a tree or investigate a wild animal that may seem dangerous to humans. Suggest other community helpers: highway department workers, trash collectors, teachers, or mail carriers. Discuss how those helpers keep us safe.

**Rad Review:** Have your child write and send a thank you letter to one of their community helpers. Help them think outside the box to identify those who are not commonly recognized for their contributions. For example, they might write a letter to someone in the neighborhood who has helped residents in some way. For tips on helping all learners with writing, see page 27.
Power goal: Find and use factors and multiples.

Learning choices:
You are at the Ozark Corn Maze in Fayetteville, Arkansas. The map for the maze tells you that you need to find the factors of a multiple to get through the maze.

1. Let’s Practice! Find the factors of 24 to complete the table.

<table>
<thead>
<tr>
<th>factor</th>
<th>x</th>
<th>factor</th>
<th>=</th>
<th>multiple</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example</td>
<td>1</td>
<td>x</td>
<td>24</td>
<td>=</td>
</tr>
<tr>
<td>A.</td>
<td>2</td>
<td>x</td>
<td></td>
<td>=</td>
</tr>
<tr>
<td>B.</td>
<td>x</td>
<td>8</td>
<td></td>
<td>=</td>
</tr>
<tr>
<td>C.</td>
<td>4</td>
<td>x</td>
<td></td>
<td>=</td>
</tr>
</tbody>
</table>

2. Now that you have practiced how to find factors of a multiple, try to find the factors for multiple 36. Use the factors of 36 below to complete the maze from start to end.

Use these numbers to go through the maze.
Answers: 1A. 2 x 12 = 24 B. 3 x 8 = 24 C. 4 x 6 = 24 D. 2 x 18; 3 x 4; 6 x 9; 12 x 18; 36.
**Power Goal:** Explain how different characteristics help living things survive.

**Learning Choices:**

**Adaptation:** any behavioral or physical characteristics of an organism that help it survive in its environment.

<table>
<thead>
<tr>
<th>Behavioral Adaptations</th>
<th>Physical Adaptations</th>
</tr>
</thead>
<tbody>
<tr>
<td>The things organisms do to survive. Example: <em>Black bears hibernate in the winter.</em></td>
<td>The part of an organism’s body that helps it survive. Example: <em>Black bears have thick fur.</em></td>
</tr>
</tbody>
</table>

1. Read the description and label it as a (BA) behavioral adaptation or a (PA) physical adaptation.

- **A.** Copperheads produce venom to defend themselves and attack prey.

- **B.** Opossums play dead when they are in danger.

- **C.** Hawks use sharp talons for hunting prey.

- **D.** Monarch butterflies migrate to follow their food source.

- **E.** Catfish have long whiskers to help them find food in murky water.

2. Choose an animal that you enjoy learning about. Think of a behavioral and a physical adaptation that helps it survive in its environment.

<table>
<thead>
<tr>
<th>Animal</th>
<th>Behavioral Adaptation</th>
<th>Physical Adaptation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Power Goal:** Know and apply phonics and word analysis skills in decoding words.

**Learning Choices:**

Unlike a **root word**, which is a word without a prefix or suffix, a **root** is the foundation of a new word and is not typically a stand-alone word. A root can help you discover new words by using what you already know to form new words.

1. **Root web** - Brainstorm as many words as you can that begin with the root *port* to complete the web. You can also look in books or magazines to help you. One has been done for you.

   *port: carry or harbor*

   transport

   __________

   __________

   __________

2. **Suffix web** - Keep the wheel rolling by adding root words (base words) with the suffix *-tion*. One has been done for you.

   *-tion: the act of, state of, or result of*

   transportation

   __________

   __________

   __________
Power Goal: Identify responsibilities and powers of government officials in different branches of state government.

Learning Choices:
Arkansas has three branches of government. Each branch of government has different responsibilities and powers. The legislative branch, which includes the Senate and the House of Representatives, makes the laws. The executive branch, which is led by the governor, carries out the laws. The judicial branch, made up of the courts, interprets the laws, and makes sure we understand the laws and how they should be carried out.

Identify the responsibilities and powers of each of the three branches by completing the crossword puzzle below. Use the word bank.

Word Bank:
attorney general
effective
governor
judicial
legislative
lieutenant governor
representatives
senate
Supreme Court
three

Across
1. the lawyer for the state of Arkansas
2. branch that enforces the law
3. this office takes over if the governor is out of state
4. the highest level of the judicial branch
5. this branch is split into two houses that create bills to become law

Down
1. branch of government that interprets the laws to ensure justice and fairness
2. the half of the legislative branch that has 100 members
3. the half of the legislative branch that has 35 members
4. the head of the executive branch
5. the number of branches in the government

Answers Across: 5 - attorney general; 6 - executive; 7 - lieutenant governor; 8 - Supreme Court; 9 - legislative Answers Down: 1 - judicial; 2 - representatives; 3 - senate; 4 - governor; 10 - three
Parent/Caregiver Plan

Math (3-5)

**Power Goal:** Find and use factors and multiples.

**Shine and Share:** Ask, “What is 5 x 4?” Discuss that the answer, 20, is called the **multiple** and the two numbers multiplied together are called **factors**. Explain to your child that 5 and 4 are not the only factors of the multiple 20: 1, 20, 2, and 10 are also factors. Allow them to practice factors of the multiple of 8.

**Learning Choices:**
1. The operation of division can be used to find factors of multiples. For example, to determine if 2 is a factor of 24, divide 24/2 = 12. There are no remainders so, 2 and 12 are factors for the multiple 24.
2. Use the graphic to help your child understand factors and multiples. It may help them to see this as a number sentence as they search for the factors of 36. Encourage them to write out the number sentences to help them find the missing number or factor. Example: 4 x ____ = 36.

**Rad Review:** For more practice using factors and multiples, have your learner look at the back cover of this Power Packet labeled Helping All Learners and look for math tips. There is a link here for these tips and resources [Power Packet Helping All Learners](https://bit.ly/3a7T5CV).

Science (3-5)

**Power Goal:** Explain how different characteristics help living things survive.

**Shine and Share:** Have your child pretend they are moving to a new environment that is different from Arkansas (such as Alaska). Ask them to explain the ways they would have to adapt to living there. How would they adapt to colder temperatures? Ask your child how other animals must adapt to survive. For example, baby deer and elk are born with white spots to help them blend into their environments to stay safe from predators.

**Learning Choices:**
1. Ask your child to explain the difference between a behavioral and a physical adaptation by giving an additional example. Guide them to use the example as they read about each animal in the table.
2. Your child may choose any animal to complete this activity. Encourage them to choose one that they know a lot about or one they can observe. They may also use a book or a website to find information about that animal.

**Rad Review:** Camouflage is a common adaptation. Have your child use camouflage to blend into a place in their environment. It can be inside or outside. They may use clothing or use other available materials such as crayons, markers, and paper to help them. To explore more, check out [Living Things Change: Crash Course Kids #411 - YouTube](https://bit.ly/3a38bd4).
**Parent/Caregiver Plan**

**Literacy (3-5)**

**Power Goal:** Know and apply phonics and word analysis skills in decoding words.

**Shine and Share:** When studying word roots, it could be helpful to relate a word to a picture that helps explain the word’s meaning. For example, for the root “port,” a picture of a boat could be used to relate the root with carrying or protecting.

**Learning Choices:**
1. Help your child discover Greek and Latin roots and word parts. The Latin root “aqua” means water, so the root in the word *aquarium* helps us understand that an aquarium is a tank that holds water for plants and animals. Help your child discover roots within words to help determine their meanings. This website may help you explore further: [https://www.readingrockets.org/article/root-words-roots-and-affixes](https://www.readingrockets.org/article/root-words-roots-and-affixes).

2. Here’s a strategy to make word meanings clearer: Draw a line between the root word (base word) and the suffix (Example: bash/ful). However, be careful because this strategy may not always work. *Bash* means to “hit very hard” and *ful* means “full of.” This would make *bashful* mean *full of a very hard hit*, which is not its meaning. *Bashful* means shy or timid. Practice this strategy using the words with suffixes. (Honig, Bill, et al. *Teaching Reading Sourcebook*. Arena Press, 2013).

**Rad Review:** Choose from one of the following word roots, and go on a scavenger hunt to locate words with this root. On another sheet of paper, write the words.

| rupt | spect | duct |

**Social Studies (3-5)**

**Power Goal:** Identify responsibilities and powers of government officials in different branches of state government.

**Shine and Share:** Understanding how our state government works is an important part of being a responsible citizen. Discuss with your child the responsibilities and powers of the three branches of government. The legislative branch writes the laws; the executive branch enforces the laws; the judicial branch helps us understand the laws. For example, the legislative branch passes bills which the governor, as head of the executive branch, signs into law, and then the judicial branch explains how the law is applied.

**Learning Choices:** Help your child read all the terms and clues in the word bank. Discuss any terms that your child has questions about. Remind your child that they are thinking about the state government instead of the federal government. So, the numbers of members in the legislative branch is fewer. If your child is unfamiliar with crossword puzzles, it may help to count the number of letters in each word, and to cross out words from the word bank as they are used.

**Rad Review:** Follow the link to visit the Arkansas Secretary of State website to explore games and activities related to Arkansas history and government. [Arkansas Secretary of State](https://bit.ly/3I5dMMn)
While you are working with children to boost their learning, consider these tips and tools to help all learners.

<table>
<thead>
<tr>
<th>Skill</th>
<th>Strategy/Resource</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication</td>
<td>Helping</td>
<td>With your help or guidance, allow children to help with chores and everyday tasks, including things such as talking with salespeople or checking out at a store.</td>
</tr>
<tr>
<td>Writing</td>
<td>Chunking Writing Tasks</td>
<td>Instead of asking children to write an entire piece, divide it into smaller parts.</td>
</tr>
<tr>
<td>Writing</td>
<td>Talk It Out</td>
<td>If a child needs help with writing, allow them to talk through their answers in other subject areas such as math or science instead of having them write their answers.</td>
</tr>
<tr>
<td>Reading</td>
<td>Chunking Text</td>
<td>Break long texts into shorter sections. Have children read or listen to one section at a time, pausing to discuss or write about each one before reading the next.</td>
</tr>
<tr>
<td>Reading in Math</td>
<td>Build Background Knowledge Prior to Reading</td>
<td>Before having a child read a text or story, consider what vocabulary words or ideas they might be unfamiliar with and explore those together, first.</td>
</tr>
<tr>
<td>Math</td>
<td>Read Aloud</td>
<td>For children who need help with reading, reading math problems to them will help them focus on the problem without struggling to understand it.</td>
</tr>
<tr>
<td>Math</td>
<td>Manipulatives</td>
<td>Children can work through a math problem by moving around small household objects such as building blocks, pencils, coins, rocks, beans, cereal, etc.</td>
</tr>
<tr>
<td>All</td>
<td>Different Ways of Knowing</td>
<td>Encourage learning activities involving multiple senses and types of intelligences, such as:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Nature Spotlight: Take a walk and write down what you see, smell, hear, and sense through touch.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Body Movement Spotlight: Create a dance or athletic routine.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Word Spotlight: Create a poem or a set of jokes using the power words.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• People Spotlight: Get with family members or friends and play or make a game, complete a puzzle, or put on a performance.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Self Spotlight: Express your feelings by building or creating something, drawing, or writing a journal entry.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Number Spotlight: Using an everyday object, measure different things in/around your home (example: the chair is 12 forks tall).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Musical Spotlight: Read books to the tune of different genres of music.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Visual/Creative Spotlight: Draw or sketch something you learned.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Technology Spotlight: Create a presentation/game to show your learning.</td>
</tr>
</tbody>
</table>

For our full list of tips, including links to online resources, visit myarpbs.org/helpinglearners