## Power Packet 2

Fun learning activities for K-5th Grade!



# SUMMER LEARNING

Arkansas PBS



# Rise and shine!





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 <u>myarkansaspbs.org/riseandshine</u> 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!

Welcome, friends! We're

#### power packet guide:

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- "Helping All Learners" Page 15 (<u>myarpbs.org/helpinglearners</u>)

## Math Power Page (K-2)

**POWER GOAL:** Solve addition and subtraction problems.

#### **Learning Choices**:

1. Look at the number sentences below. Fill in the correct numbers to make the number sentences true. Pick one number sentence to DRAW out, then explain how you solved it.



2. Look at the number sentences below. Find the sums. Using a picture, draw and explain why BOTH number sentences have the same answer.

3. Gather 16 items from your surroundings. Look at the number sentences below and group your items. Find two DIFFERENT ways to add up to 16.

4. Optional Online Resource: <u>myarpbs.org/pegcatgames</u>
In this game, you will practice your matching and math skills as you shop for Peg's friends.



### Science power page (K-2)

**POWER GOAL:** Talk about how light interacts with objects.

#### Learning choices:

1. Some objects interact with light in more than one way. Find three objects in your surroundings to add to the chart, then record your observations.

Object	Reflects light	Creates a shadow	Allows light through
Example: iPad	✓	✓	

2. Draw arrows to show how light interacts with the following objects. Use the example as a model.



3. Think about how light interacts with objects such as mirrors, windows, and boxes. Create a shadow puppet play that tells how and why shadows are made. Refer to the other light activities that you have completed. Use this optional online resource: <a href="mayer-bs.org/sidthesciencekid">myarpbs.org/sidthesciencekid</a> to help plan your shadow puppet play. The link will take you to a video that will help you explore shadow puppets and other ways to learn about and have fun with shadows.



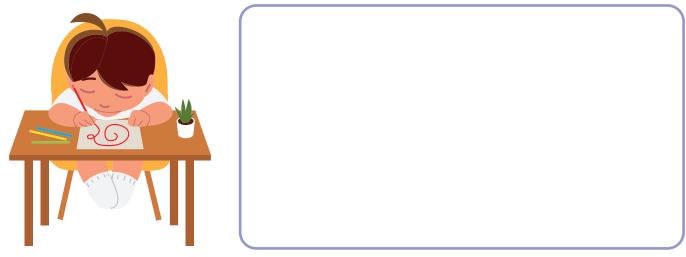
## Literacy power page (K-2)

**POWER WORDS:** equation, sphere, realistic

**POWER GOAL:** Read and respond to stories.

#### **Learning Choices:**

1. Recall a story, imagine your favorite part, and illustrate it.



2. Sum up a story in your own words using the Somebody-Wanted-But-So chart.

ВООК		
S	{Somebody}	
N	{Wanted}	
B	{but(problem)}	
2	{So(solution)}	



## social studies power page (K-2)

**Power Goal:** Explain how weather and climate affects the lives of people and their surroundings.

#### **Learning Choices**:

1. **Connect:** Certain clothing and items are right for different climates. Draw a line that connects the type of clothing or item to the place it fits. **Some items may go with more than one environment.** 



2. **Create:** Draw or paint a picture of your environment. You could show your state, city, neighborhood, street, or home.

3. **Imagine:** If you could create the perfect place to live, what would your place be like? Think about the weather, animals, the number of people living there, etc. Write a paragraph describing your new place. Instead of writing, you could talk about it.



### Math (K-2)

**POWER GOAL:** Model and solve problems involving addition and subtraction.

**Shine and Share:** Ask the child, "How many different combinations can you think of that will add up to 10?" Allow "think" time. Paper, pencil, and small counting toys, etc. may be used to help answer this question. After they give a few answers, talk about how there are many different combinations of numbers that may be added to get to a certain sum or subtracted to get to a certain difference.

#### **Learning Choices**:

- 1. The child needs to fill in the correct numbers to make the number sentences true. They need to pick one number sentence to DRAW out. Then have them explain how they solved it. (See Power Page.)
- 2. On the Power Page, look at the number sentences. Have the child find the sum for both problems. Have the child draw a picture to explain why they BOTH have the same answer.
- 3. The child will find two DIFFERENT ways to add up to 16. (See Power Page.)
- 4. Online game Peg + Cat Shopping. Follow this link: <u>myarpbs.org/pegcatgames</u> In this game, the child will practice their matching of shapes and numbers as well as shopping skills.

**Rad Review:** Ask the child to come up with 3 different ways to add or subtract to the following numbers: 7, 12. and 3.

science (K-2)

**POWER GOAL:** Discuss how light interacts with objects.

**Shine and Share:** Ask the child to think of what happens when they shine the light on a mirror. What happens when you shine a light on your hand? What happens when you shine a light on a window? Discuss how light can be reflected off an object, pass through an object, or not pass through an object and create a shadow.

#### Learning choices:

- 1. Help the child fill out the chart for how light interacts with certain objects. Some objects interact with light in more than one way. (See Power Page.)
- 2. Help the child use a flashlight to SAFELY shine the light on the hand, mirror, window, and cardboard box. (Be sure that when child is using the flashlight, they do not flash it directly into their or another person's eye. Also, be sure to watch when they are flashing the light at reflective items.) Have the child draw how light interacts with each object. If you do not have a flashlight, help them use their BEST judgement to guess how light WOULD interact with each object. (See Power Page.)
- 3. Have the child think about how light interacts with objects such as mirrors, windows, and boxes. Help the child create a shadow puppet play that tells how and why shadows are made. Have the child refer to the other activities about light. Optional Online Resource: <a href="mailto:myarpbs.org/sidthesciencekid">myarpbs.org/sidthesciencekid</a> explores shadow puppets.

**Rad Review:** Next time you and the child are outside or take an outing (to the store, a restaurant, etc.), ask questions about how certain objects are interacting with light. Is light passing through certain objects? Are shadows being created?



### Literacy (K-2)

**POWER WORDS:** equation, sphere, realistic

**POWER GOAL:** Read and respond to stories.

**Shine and Share:** Story elements are parts of a story or book that include the character(s), setting, plot, problem, and solution. The characters are the people, animals, or objects in the story. The setting is when and where the story takes place. The plot is the main event of the story. The problem is something that happened in the story. The solution is how the problem was solved.

Choose a book to read and then ask these questions: "Who is the main character?" "Where and when does the story take place?" "Why did the events happen?" "How does the story end?"

#### **Learning Choices:**

- 1. Read a short fiction book and talk about the characters, setting, problem, and solution. Let the child choose their favorite part of the story and use materials to draw it out.
- 2. Help the child complete the SWBS ("Somebody-Wanted-But-So") Chart. To retell the story, say the words, "Somebody... wanted..., but..., and so..." and have the child finish the phrases to show their understanding of the story's plot. This can be done orally or written on paper. Example: "Big Billy Goat, Middle Billy Goat and the Little Billy Goat (the somebodies) wanted to cross the bridge, but the troll wouldn't let them, so the Big Billy Goat knocked him off the bridge."

**Rad Review:** Notice how characters appear in stories. Have the child think of ways the traits of these characters affect how the story unfolds. How they think or act makes characters appear realistic in the text. When reading, help the child make personal connections to characters in stories they hear or read.

### Social Studies (K-2)

**POWER GOAL:** Explain how weather and climate affects the lives of people and their surroundings.

**Shine and Share:** Talk about what your surrounding is like (weather, climate, etc.) and compare it to other surroundings. For example, Hawaii is mostly sunny and warm all year round, but Canada can become extremely cold in the winter.

#### Learning Choices:

- 1. **Connect:** Have the child complete the matching chart on the Power Page.
- 2. **Create:** Have the child draw or paint a picture of their surroundings. This could be a drawing of their state, city, neighborhood, street, or home.
- 3. **Imagine:** If you could create the perfect place to live, what would your place be like? Think about the weather, animals, the number of people living there, etc. Have the child write a paragraph describing their new place. Instead of writing, you could also have the child talk about the place.

Rad Review: Have the child describe any new changes in their environment.



### Math Power Page (3-5)

**POWER GOAL:** Draw and identify lines and angles.

#### **Definitions**:

Remember: A line is straight (with no bends), has no thickness, and extends in both directions without end.

#### **Learning Choices**:

1. Match the definition with the correct picture.



a. Lines are <u>parallel</u> if they are always the same distance apart and will never meet.



b. An <u>acute angle</u> is an angle that measures between 90° and 0°, smaller than a right (90°) angle.



An <u>obtuse angle</u> is an angle that measures more than 90° and less than 180°, larger than a right (90°) angle.



d. A <u>right angle</u> is an angle that measures 90°.



e. A perpendicular line is a line that crosses another line at a 90° angle.





## Science power page (3-5)

**POWER GOAL:** Explain what happens to plants or animals when their surrounding conditions change.

<u>Background Information:</u> A habitat is a place where a living thing lives. A healthy habitat has all the food, water, shelter, and space that a living thing needs. There are different types of habitats around the world such as forests, deserts, lakes, and oceans. Here is where you can find info on habitats: <u>bit.ly/3je7teW</u>

#### **Learning Choices**:

Using background knowledge, research, and your own ideas, complete the following activities.

1. In the box below, create and draw an original animal or creature <u>in its habitat</u>. You could combine more than one animal to make a new creature but focus on being as original possible. Since this is your original creature, fill in the spaces below to tell more about your creature.

Name: (The name might reference an adaptation (special skills or physical characteristics that help the animal survive) of the animal. Example: Floppy-Ear Freddie)	
Environmental Challenges: (Describe environmental (surrounding) conditions that the creature must adapt to so that it survives. Example: hot, dry weather, lots of rain, saltwater, etc.)	
Food: (Describe the creature's diet. Be sure to think about where the animal lives when picking its diet.)	
Special Features: (Describe adaptations that make the creature well-suited for life in its habitat. Example: webbed feet, fur, storing water, etc.)	
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### Literacy power page (3-5)

POWER WORDS: irk, nucleus, hypothesis, skeptical, substance

POWER GOAL: Read and respond to stories.

#### **Learning Choices**:

1. Read the story below and use the chart to organize your details about the Tortoise or the Hare.

#### The Tortoise and The Hare

One day the Hare made fun of Tortoise's short feet and slow speed. Laughing, the Tortoise replied, "Though you may be fast as the wind, I will beat you in a race." The Hare was skeptical that the Tortoise would beat him and irked that the Tortoise would hypothesize such a thing. On the day of the race, the Hare gave the Tortoise a head start, feeling that he would easily beat him. The Tortoise never stopped but continued with a slow and steady pace. Since the beginning of the race, the hare was in the lead. After a while, the Hare decided that he was far enough ahead to rest and fell asleep. Slow and steady, the Tortoise passed the Hare and reached the finish line first. At last, the Hare reached the end of the course, but there was the Tortoise! He had won the race because he moved steadily and never stopped.

Character	Actions	Event
Tortoise		
Hare		

2. Become a Text Detective: As you read a fiction book, use the table to fill in the information. This can also be done virtually at <a href="mailto:myarpbs.org/blueribbonreaders">myarpbs.org/blueribbonreaders</a>

Author:	Title:
Character Trait	
Setting (Time and Place)	
Main Idea	

and steady pace and won the race.

Answer: The Hare was over-confident that he would win because of how fast he was. He took a break, fell asleep, and lost the race to the slow Tortoise. The Tortoise thought that he would win because he was consistent. He continued the race at a slow



## social studies power page (3-5)

**POWER GOAL:** Understand and apply the idea of supply and demand.

#### Learning choices:

- 1. Watch: Follow this video link to learn more about supply and demand. bit.ly/3vLgcYZ
- 2. **Analyze:** In the chart below, some common products are listed. Read the wild and wacky event that is provided. Next, think about whether the price of the product will increase or decrease because of the event. Write your reasons in the chart.

Supply & Demand			
Supply	Event	Reason(s) for price increase	Reason(s) for price decrease
Milk	All of the dairy cows went on strike and demanded that humans drink almond milk.		
Cars	Thanks to the invention of the Jumpin' Jack Jetpack, humans can now fly to their destinations.		
Smartphones	Most phone parts are made in other countries. There was a big volcano that erupted making it impossible to transport by air or sea. Shipments of phones will be delayed for months. Yikes!		
Gas	A young student from a small town invented a way to make gaspowered engines run from sawdust and french fry oil.		

3. **Predict:** Choose three of your favorite products, anything from candy and toys to hunting equipment and video games. Think about the things that would affect these supplies and guess whether the price of those supplies will increase or decrease over the next year.



Math (3-5)

**POWER GOAL:** Draw and identify lines and angles.

**Shine and Share:** Ask the child what they know about parallel and perpendicular lines. Review that parallel means the lines always stay the same distance apart and NEVER intersect or cross (think set of railroad tracks). Perpendicular lines intersect or cross at a 90 degree/right angle. Look around your house and find items that have perpendicular, parallel, or intersecting lines.

#### Learning Choices:

- 1. Have the child use given background knowledge to fill out the chart on the Power Pages.
- 2. Visit <u>bit.ly/3qHTJyQ</u>. Have the child use the example to write their name. Then help them label the parallel and perpendicular lines (if they are any). Then have them label the acute, obtuse, and right angles (if there are any).

**Rad Review:** Challenge the child to use their arms, legs, and body to create the different types of lines and angles such as, parallel, perpendicular, right, obtuse, acute, etc.





**science (3-5)** 

**POWER GOAL:** Explain what happens to plants or animals when their surrounding conditions change.

**Shine and Share:** Ask the child where they feel the most comfortable (home, bedroom, grandparent's house etc.). Have them think aloud about how they would feel if they were to spend time in an environment where they do not feel as comfortable. They can then try and connect this to how animals feel, react, and change when their environments are changed.

#### **Learning Choices**:

Support the child as they create an original creature. You might help them brainstorm or be a sounding board for ideas. See Power Pages

Rad Review: Discuss with the child some of the following:

Why do animals live in certain areas? How does changing an animal's habitat (place where something lives) affect the animal? What happens if an animal's habitat is destroyed?



### Literacy (3-5)

#### POWER WORDS: irk, nucleus, hypothesis, skeptical, substance

**POWER GOAL:** Read and Respond to stories.

**Shine and Share:** Talk to the child about how a story has parts. Mention that an author creates a story that includes characters (for example, people or animals in the story) along with the setting (the time and place where the story happens) and even a theme or main idea of the story. You can share this short fable from Aesop: "The Four Oxen and the Lion." Lion used to sneak about a field in which four oxen lived. Many times, the lion tried to attack the oxen. However, whenever the lion came near, the oxen would turn their tails to one another, so that whatever way the lion approached, he was met by the horns of one ox. One day the Oxen began arguing among themselves, and each went off to a separate corner of the field to live alone. Then, one by one, Lion attacked and killed all four oxen.

Talk about the characters in the fable (Lion and the four oxen), the setting (the field or pasture), and the theme ("United we stand, divided we fall."). Also, you might talk about how the oxen's fighting (and then going off by themselves) allowed the lion to be able to take them down.

#### **Learning Choices**:

- 1. Have the child read the passage on the Power Page. Then have them describe one character and how their actions led to the events in the story. (See Power Page.)
- 2. Have the child become a Text Detective: Fill in the chart on the Power Page as they read a fictional book and use the text to find information.

**Rad Review:** Throughout the week, have the child talk to you about what they are reading. Talk about the parts of a story (characters, setting, and theme) with them and see if they can explain those things on their own.

### social studies (3-5)

**POWER GOAL:** Understand and apply the idea of supply and demand.

**Shine and Share:** To understand this idea, the child will need some background knowledge of the topic. Explain to the child that supply means the number of goods (things you can buy) that are available. Demand means the number of people who want to buy those goods. When there is a large supply of goods and less people want to buy those goods, the price of a product goes down. However, when there is a shortage of products and a lot of people want to buy those products (demand), the price of the product goes up, quickly!

#### Learning choices:

- 1. Watch: Follow this video link to learn more about supply and demand. bit.ly/3vLgcYZ
- 2. Analyze: See chart on power page for instructions and examples.
- 3. **Predict:** Up or Down activity. Have the child choose three of their favorite products, anywhere from candy and toys to hunting equipment or video games. Have them guess whether the price of those supplies will go up or go down over the next year.



**Rad Review:** A good way to review supply and demand is to have the child pay attention to the price of gas. Talk with them about any changes they notice.

#### Helping all Learners

While you are working with children to boost their learning, consider these tips and tools to help all learners.

Skill	Strategy/Resource	Description
Communication	Helping	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.
Writing	Chunking Writing Tasks	Instead of asking children to write an entire piece, divide it into smaller parts.
Writing	Talk It Out	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.
Reading	Chunking Text	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.
Reading	Build Background Knowledge Prior to Reading	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.
Reading in Math	Read Aloud	For children who need help with reading, reading math problems to them will help them focus on the problem without struggling to understand it.
Math	Manipulatives	Children can work through a math problem by moving around small household objects such as building blocks, pencils, coins, rocks, beans, cereal, etc.
All	Different Ways of Knowing	Encourage learning activities involving multiple senses and types of intelligences, such as:  Nature Spotlight: Take a walk and write down what



- Nature Spotlight: Take a walk and write down what you see, smell, hear, and sense through touch.
- Body Movement Spotlight: Create a dance or athletic routine.
- Word Spotlight: Create a poem or a set of jokes using the power words.
- People Spotlight: Get with family members or friends and play or make a game, complete a puzzle, or put on a performance.
- Self Spotlight: Express your feelings by building or creating something, drawing, or writing a journal entry.
- Number Spotlight: Using an everyday object, measure different things in/around your home (example: the chair is 12 forks tall).
- Musical Spotlight: Read books to the tune of different genres of music.
- Visual/Creative Spotlight: Draw or sketch something you learned.
- Technology Spotlight: Create a presentation/game to show your learning.



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

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