This packet contains activities for children ages 3-8. Activities can be used and adapted to meet the particular needs of your child.
After learning that shadows are made by blocking light, children will investigate how the position of the light can make shadows grow or shrink, and how to change the shape of a shadow.

**Additional Materials**
- Cat in the Hat Character Puppets
- Cat in the Hat Measuring Tool

**Silly Story Builder**
*Martha Speaks*

Authors use character, setting, and action to help tell a story. Get ready to experience just that as you and your child create silly stories by drawing story parts out of a bag.

**Some Assembly Required**
*Cat in the Hat Knows a Lot About That!*

Learn about structures with Cat in the Hat. Children will discover that structures need a strong and stable base, so they don’t fall over.

**Coin Toss**
*Cyberchase*

Lift off! Try launching a few coins and see how easy it is to count by twos, fives, tens, and even twenty-fives.

**Push, Slide Bounce**
*Hero Elementary*

Investigate the ways that a push can cause an object to start moving or stop moving. Observe and compare the effects of strong pushes and weak pushes.

**Playing Games with Hundreds Chart**
*Peg + Cat*

Use a hundreds chart as a playing board in these fun and simple games for ages 3-8.
EXPLORE

Your child will explore shadows with flashlights and how the position of the light can make shadows grow or shrink.

Materials:
Objects to create shadows. Suggested materials include:
• Cat in the Hat Shadow Puppet Character Cards
• Toy cars
• Legos
• Small plushy animals
• Flashlight or other light sources
• Markers/pencils
• Craft sticks
• Masking tape
• Butcher paper and/or copy paper
• Cat in the Hat Measuring Tool
• Create a shadow puppet theater from whatever you have available: rope, clothespins, bedsheet, wax paper, tent, chairs, table, butcher paper, etc.

Instructions:
1. Set up makeshift shadow theater.
2. Create stick puppets using the PBS KIDS The Cat in the Hat Knows A Lot About That! Shadow Puppet Character Cards
3. Using the various light sources available, explore shadows.
   a. Create and draw shadows on paper.
   b. Investigate in the shadow theater.
   c. Create a puppet show.
4. Together investigate questions about shadows.
   a. Can you make a shadow bigger? Smaller?
   b. What do notice if you place the flashlight high up or down low?
   c. Explore any other questions you come up with!

More Ways to Play:
• Write and perform your own family shadow puppet play.
• Become shadow detectives and track shadows on a sunny day.

READ

Read together The Black Rabbit by Philippa Leathers.

Before reading:
Read the title, author and illustrator. Ask, “Who do you think the Black Rabbit is?”

Discuss during or after reading:
• Do you think Rabbit will get rid of the Black Rabbit? Why or why not?
• When Rabbit goes into the deep, dark woods, the Black Rabbit disappears. Why?
• What happened to make the wolf run away?

Other book suggestions:
• Guess Whose Shadow? by Stephen Swinburne
• Light: Shadows, Mirrors, and Rainbows by Natalie Rosinsky
• Moonbear's Shadow by Frank Asch
• My Shadow by Robert Louis Stevenson, Sara Sanchez
• Nothing Sticks Like a Shadow by Ann Tompert
• What Makes a Shadow? by Clyde Robert Bulla

WATCH

My Shadow Goes Where I Go! bit.ly/CITHShadows

After watching, talk about what you have watched.
• Where do you think the shadows are coming from?
• Does everything have a shadow?

PLAY

Play & Learn Science! – Shadow games

These games can be found within the Play & Learn Science app that is available for free on your tablet or phone in app store.

Co-play with children: Play video games and use apps with children. Young children learn better from media when they share the experience with an adult. It’s a good way to demonstrate good sportsmanship and gaming etiquette.
Some Assembly Required

**WATCH**

**Design Time** bit.ly/CITHDesign

After watching, talk about what you have watched.
- Why do you think the robot can bump some things over but can’t bump other things over?
- What change did Sally and Nick make to the design of their tower? Why did they make that change?

**EXPLORE**

Your children will use their engineering skills to create a structure with a sturdy base.

**Building Materials:**
- Jumbo craft sticks
- Plastic 3 oz. cups
- Paper
- Pencil
- Optional: Yard stick, measuring tape, ruler or non-standard form of measurement

**Instructions:**
1. Allow children to work independently or with a sibling to build a tower.
2. Engage them in short conversations about their plan as they build their tower. Discussion could include:
   a. Tell me about your structure.
   b. Is your base strong enough to support how tall you want your tower?
3. Children can measure their tower using provided measurement tool(s).

**More Ways to Play:**
- Using the same materials, build the tallest tower in 5 minutes.
- Using wooden clothespins, small binder clips, and jumbo craft sticks, build a structure that supports the most amount of weight.

**READ**

Read together Iggy Peck, Architect by Andrea Beaty.

**Before reading:**
- Read the title, author and illustrator
- Ask: What is an architect? (a person who designs buildings)

**Discuss during or after reading:**
- Why do you think Miss Lila Greer dislikes architecture?
- How did things change in Miss Greer’s class after she crossed the bridge the children had built?
- What are some of the materials Iggy used in his creations?

**Other book suggestions:**
- Rosie Revere, Engineer by Andrea Beaty
- Most Magnificent Thing by Ashley Spires
- The Three Billy Goats Gruff by Stephen Carpenter
- Twenty-One Elephants and Still Standing by April Jones Prince
- What Makes a Shadow? by Clyde Robert Bulla

**PLAY**

Ruff Ruffman – Hamster Run

This game is available in the free PBS KIDS Games app. Look for it in your favorite app store. The game can also be found online at pbskids.org/ruff/structures/game.

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Silly Story Builder

EXPLORE

Children will build vocabulary, become familiar with essential parts of a story and develop story sequencing skills.

Building Materials:
• 4 paper lunch bags
• 20 3x5 index cards
• Pencil or marker

Instructions:
CREATE STORY BUILDER BAGS
1. Write Character, Setting, Action, and Wild Word on separate lunch bags.
2. With your child, choose five characters, five settings and five actions to use in your stories. Be creative. Be silly. For example, a pet rabbit, the moon and surfing would be a good start!
3. Write or draw a picture of these on individual index cards and put them in their appropriate bags.
4. Help your child identify five new words to use as “wild words” in the stories. Look in a dictionary or walk around the house to get ideas for words. Write them down on index cards and place them in the Wild Word bag.

BUILD SILLY STORIES
1. Invite your child to draw one card from each bag.
2. Create a silly story based on these cards.
3. Encourage your child to include a beginning, middle and end.
4. Take turns creating stories. Choose a favorite one and encourage your child to share it with a friend.

More Ways to Play:
• Draw multiple cards to make the story more complex.
• Take turns telling a different silly story with the same cards.
• Choose a favorite silly story and write it down. Draw pictures to illustrate it.

WATCH

T.D. Tells a Story bit.ly/MarthaSpeaks

After watching, talk about what you have watched.
• What happened at the beginning of T.D.’s story?
• Name something that happened in the middle of the story.
• How did the story end?

READ

Read together Rocket Writes a Story by Tad Hills.

Before reading:
• Read the title, author, and illustrator.
• Ask: By looking at the cover of the book what do you think the book is about?

Discuss during or after reading:
• Where does Rocket put the words he learns?
• What does Rocket decide to write a story about?
• After Rocket reads his story to the owl, what happens?

Other book suggestions:
• Be Quiet! by Ryan T. Higgins
• This Is a Moose by Richard T. Morris
• Dog Loves Books by Louise Yates
• Stick and Stone by Beth Ferry

PLAY

Scribbles and Ink

This game is available in the free PBS KIDS Games app. Look for it in your favorite app store. The game can also be found online at pbskids.org/scribblesandink/draw.

Co-play with children: Play video games and use apps with children. Young children learn better from media when they share the experience with an adult. It’s a good way to demonstrate good sportsmanship and gaming etiquette.
**EXPLORE**

This activity will help your child understand coin values, grouping, sorting, and counting by ones, fives, tens, and twenty-fives.

**Building Materials:**
- Assorted coins (at least 10 of each)
- Plastic spoon
- String

**Instructions:**
- Sort your coins into piles of pennies, nickels, dimes, and quarters.
- Create a 2-foot diameter circle with a piece of string. This will be your target.
- Grab a plastic spoon (your coin launcher) and place a coin on the scooped end.
- Hold the handle of the spoon in one hand. With the thumb of your other hand, gently pull down on the end with the coin and release.
- Practice launching your coin into the air and landing it inside the circle.

**Game Play and Points:**
- Now you are ready to play. Start with your pennies, which are worth 1 point each.
- Take turns launching pennies and adding your point values.
- Next try some nickels. Count by fives as you successfully land each nickel inside the circle.
- Continue the game with your dimes (counting by tens) and quarters (counting by twenty-fives).

**More Ways to Play:**
- Return to your pennies and try launching two at once. Now you can count by twos!
- Try some more addition with multiple coins. Imagine that your circle is a cash register. Call out a price under one dollar, such as 55 cents. As a team, work together to “feed” the cash register the right value of coins.

**WATCH**

Using Grouping to Count Quickly

bit.ly/CyberchaseCoins

After watching, talk about what you have watched.
- What were they trying to count quickly?
- What did they come up with as a quick and efficient way to get an accurate count without counting them one by one?
- How many total eggs did they have?

**READ**

*Read together Mall Mania by Stuart J. Murphy.*

**Before reading:**
- Read the title, author, and illustrator.
- Ask: By looking at the cover of the book what do you think the book is about?

**Discuss during or after reading:**
- What are they celebrating at the Parkside Mall?
- How are the members of the Wilson Elementary Chess Club sharing information?
- Who ends up being the lucky 100th shopper?

**Other book suggestions:**
- *Alexander, Who Used to Be Rich Last Sunday* by Judith Viorst
- *Lemonade in Winter: A Book About Two Kids Counting Money* by Emily Jenkins & G. Brian Karas
- *A Chair For My Mother* by Vera B. Williams
- *The Penny Pot* by Stuart J. Murphy

**PLAY**

**Peg + Cat - Mega Mall**

This game is available in the free PBS KIDS Games app. Look for it in your favorite app store. The game can also be found online at pbskids.org/peg/games/mega-mall.

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Push, Slide, Bounce!
Make Your Own Mini-Golf Game

EXPLORE
Your child can investigate the strength and direction of pushes. And your child can predict what will happen when an object collides with another object. Celebrate as your child figures out how to reach the finish line!

Materials:
- Plastic container lids or wide-mouth canning lids
- Markers
- Tape
- Small boxes or other objects to build a “mini-golf” course, heavy enough for a lid to bounce off them

Instructions:
- On one long strip of tape, write START. On a second long strip of tape, write FINISH.
- Set up a mini-golf course with the strips of tape and boxes (or other objects). Use the image below as an example.
- Your child will try to move the lid from START to FINISH with the fewest pushes. Encourage your child to predict what will happen when they push the lid or bounce it off other objects.

More Ways to Play:
- How many different ways can your child set up a mini-golf course? Try different set-ups. Maybe move the START or FINISH. Maybe add another box. Then play again. Encourage your child to explain how they got the lid where they wanted it to go.

READ
Read together Oscar and the Cricket: A book about moving and rolling by Geoff Waring.

Before reading:
- Read the title, author, and illustrator.
- Ask: What do you think Oscar will do with the ball? What would you do if you found a ball?

Discuss during or after reading:
- What causes the ball to move the way it does?
- What finally causes Oscar’s ball to stop?
- Tell me why you think the ball rolled fast on the path and slow in the grass.

Other book suggestions:
- Oh No! (Or How My Science Project Destroyed the World) by Mac Barnett
- The Girl Who Never Made Mistakes by Mark Pett and Gary Rubinstein
- Move It! Motion, Forces and You (Primary Physical Science) by Adrienne Mason
- Newton and Me by Lynne Mayer

PLAY
Ruff Ruffman - Fish Force
This game is available in the free PBS KIDS Games app. Look for it in your favorite app store. The game can also be found online at pbskids.org/ruff/sports/game.

Co-play with children: Play video games and use apps with children. Young children learn better from media when they share the experience with an adult. It’s a good way to demonstrate good sportsmanship and gaming etiquette.

WATCH
Pushes and Pulls
bit.ly/Her0E1em
After watching, talk about what you have watched.
- What problem did the Sparks’ crew have?
- What caused the giant squeaky ball to roll slower?
- How did the Sparks’ crew finally stop the giant squeaky ball?
- In the end, what happened to the giant squeaky ball?

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**Playing Games with the Hundreds Chart**

**Gráfica de conteo de centenas**

**Hundreds Chart Count**  
*(ages 3–8)*  
Each player puts a playing piece (such as a penny or dried bean) near 1, just outside the frame of the chart. Players take turns rolling a pair of dice, adding them up, and moving that number of spaces forward (starting with 1). The first player to reach (or pass) 100 wins! For younger children (ages 3–5) use one die.

**Hundreds Chart by 5’s and 10’s**  
*(ages 6–8)*  
Cut 10 index cards into quarters so you have 40 small cards. Write the number 5 on 20 of the cards, and the number 10 on the rest. Mix them up. Each player places a playing piece near 1, just outside the frame of the chart. Players take turns drawing cards and counting by 5’s or 10’s to move ahead. The first player to reach (or pass) 100 wins!

**Number Capture!**  
*(ages 6–8)*  
Use small pieces of paper to cover 5 or 10 numbers on the hundreds chart. Challenge your child to guess the numbers. You might start by covering the even numbers in the top row (2, 4, 6, 8, 10). Then make it a little harder by covering 5 or 10 random numbers in the first two rows.

**Pattern Hunt**  
*(ages 6–8)*  
Find the number 5 on the hundreds chart. Moving down the row, what number comes next? (15) What’s next? (25) What’s the pattern? (each number is 10 more) Now go diagonally from 11 (22, 33, and so on). What do you notice? Find all the numbers containing 3, such as 23 and 37. How many “3-numbers” are there?

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*(ages 6–8)*  
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**Gráfica de conteo de centenas**  
*(Edades 3–8)*  
Cada jugador coloca una pieza para jugar (por ejemplo, un centavo o frijol seco) cerca del 1, afuera del borde del tablero. Los jugadores se turnan para echar un par de dados, suman los puntos y van avanzando ese número de espacios (comenzando con el 1). Gana el primer jugador que llegue o rebase el 100. Para los niños más pequeños (de 3 a 5 años de edad), utilice un dado.

**Tablero de las centenas de 5 en 5 y de 10 en 10**  
*(Edades 6–8)*  
Recorte 10 tarjetas en cuartos para obtener 40 cartas pequeñas. Escribe el número 5 en 20 de las tarjetas y el número 10 en el resto. Cada jugador coloca una pieza para jugar cerca del 1, afuera del borde del tablero. Los jugadores intercambian turnos y sacan cartas y cuentan de 5 en 5 o de 10 en 10 para avanzar. El primer jugador que llegue o sobrepase el 100 será el ganador.

**¡Captura el número!**  
*(Edades 6–8)*  
Use pedacitos de papel para cubrir 5 o 10 números en la gráfica de las centenas. Rete a su hijo a que advine los números. Puede empezar por cubrir los números en la fila superior (2, 4, 6, 8, 10). Luego, haga el juego un poco más difícil cubriendo 5 o 10 números al azar en las primeras dos filas.

**Cacería de patrones**  
*(Edades 6–8)*  
Encuentre el 5 en la gráfica de las centenas. Bajando por la fila, pregunte: ¿qué número sigue? (15) ¿Y luego cuál sigue? 25 ¿Cuál es el patrón (cada número es mayor en 10)? Ahora vaya diagonalmente de 11 (22, 33 y así sucesivamente). ¿Qué notas? Encuentra todos los números que contienen 3, tales como el 23 y el 37. ¿Cuántos “números 3” hay?
Dancing is a great way for kids to get exercise, express their creativity, communicate feelings, and enjoy music. Try some of these dance ideas together!

**Freeze Dance**

• Put on music and have everyone dance.
• Stop the music suddenly—everyone freezes in place!
• Teach the child the basics, then put in some music and boogie!
The contents of this document were developed under a cooperative agreement #PRU295A150003, from the U.S. Department of Education. However, these contents do not necessarily represent the policy of the Department of Education, and you should not assume endorsement by the Federal Government.
Shadow Puppet

NICK

SALLY

Stick Puppet

Shadow Play

SALLY
# PBS KIDS Learning Goals

## Social & Emotional Learning
- **Sesame Street**
  - 3-6: Social & Emotional Learning
- **Calliou**
  - 2-5: Social & Emotional Learning
- **Dance & Draw**
  - 2-5: Social & Emotional Learning
- **Clifford the Big Red Dog**
  - 3-5: Social & Emotional Learning
- **Mister Rogers Neighborhood**
  - 3-6: Social & Emotional Learning
- **Arthur**
  - 4-6: Social & Emotional Learning, Social Studies
- **River Rabbit and the Secret Museum**
  - 5-8: Social & Emotional Learning

## LITERACY
- **Super Why!**
  - 2-5: Literacy
- **WordWorld**
  - 2-5: Literacy
- **Martha Speaks**
  - 4-8: Literacy, Vocabulary Acquisition
- **Molly of Denali**
  - 4-9: Literacy, Informational Texts
- **WordGirl**
  - 5-8: Literacy, Vocabulary Acquisition

## SOCIAL STUDIES, THE ARTS & MORE
- **Pinkalicious & Peter Rabbit**
  - 3-6: The Arts, Creative Expression
- **Let’s Go Luna!**
  - 4-7: Social Studies (World Cultures and Geography)

## Digital-Only
- **Knot Kingdom**
  - 3-6: Systems Thinking
- **Oh Noah!**
  - 4-8: Spanish, Cultural Awareness
- **Scrubbies and Ink**
  - 4-8: The Arts

## STEM (Science, Technology, Engineering & Math)
- **Peep and the Big Wide World**
  - 2-5: Science Inquiry, Life/Physical Science, Math
- **Splash and Bubbles**
  - 2-5: Scientific Inquiry, Life Science
- **Peg + Cat**
  - 3-5: Math
- **Curious George**
  - 3-5: Scientific Inquiry, Engineering, Math
- **Elliot Wonders Why**
  - 3-5: Scientific Inquiry, Life/Earth Science, Engineering & Technology
- **The Cat in the Hat: Know It All About That!**
  - 3-6: Scientific Inquiry, Life/Earth Science, Physical Science
- **Dinosaur Train**
  - 3-6: Scientific Inquiry, Life/Earth Science
- **Sid the Science Kid**
  - 3-6: Scientific Inquiry, Life/Earth/Physical Science, Math
- **Nature Cat**
  - 3-7: Life/Earth Science
- **Wild Kratts**
  - 4-8: Scientific Inquiry, Life Science
- **Cyberchase**
  - 4-8: Math
- **Hero Elementary**
  - 4-8: Scientific Inquiry, Life/Earth & Space/Physical Science, Engineering & Technology
- **Odd Squad**
  - 5-8: Math
- **Ready Jet Go!**
  - 5-8: Scientific Inquiry, Life/Earth & Space/Physical Science, Engineering & Technology

## Digital-Only...
- **The Ruff Ruffman Show**
  - 4-8: Scientific Inquiry, Physical Science, Engineering & Technology
- **Design Squad Nation**
  - 4-8: Scientific Inquiry, Physical Science, Engineering
- **PBS KIDS ScratchJr**
  - 5-8: Computational Thinking
- **SciGirls**
  - 6-8: Scientific Inquiry, Life/Physical Earth Science, Engineering & Technology, Math
The world is full of possibilities and so are you.

With KET, kids learn lessons that last a lifetime. In addition to engaging characters, PBS KIDS interactive games, videos and hands-on activities create endless opportunities for fun and learning. Learn and play at KET.org/kids.

For even more ways to ensure learning continues at home — during the summer and the school year — explore resources available for all grade levels at KET.org/LearnAtHome.

Hero Elementary is a school for budding superheroes, where kids learn to master their innate powers, like flying and teleportation, while exploring science along the way. This animated series aims to give children ages 4 to 7 the tools to solve problems by thinking and acting like scientists.

Find FREE apps and more at KET.org/kids.
KET.org/LearnAtHome
KET is providing educational programming content for PreK-12th grade students who are learning at home.

KET.org/Education/Resources/Explore-at-Home
This collection of activities will encourage PreK-3rd grade students to explore and learn at home all summer.

PBS.org/Parents
Explore parent resources to help you raise kind, curious and resilient children. Find parenting tips, hands-on activities, games, and apps.

PBSKIDS.org
Find games and videos from all your favorite PBS KIDS Characters.

SesameStreetinCommunities.org
Find activities, videos, and articles about topics including community violence, health emergencies, resilience, and school readiness.

TELL US WHAT YOU THINK!
Complete the survey and let us know how your family used the KET Summer Learning materials! Everyone that completes the survey by September 1, 2020 will be entered to win a set of books.

bit.ly/KETSurvey

Questions? E-mail NTI@ket.org
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ADDITONAL RESOURCES

ADDITIONAL RESOURCES

ADDITIONAL RESOURCES