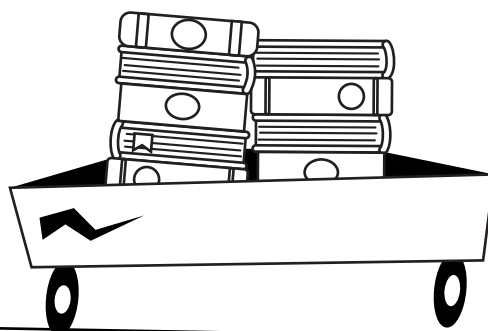
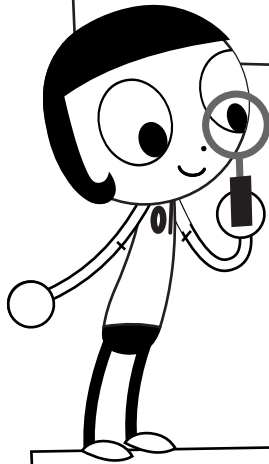




**Learn at Home with PBS KIDS**

# **Light and Shadows**

# BINGO





# Learn at Home with PBS KIDS

**Week of  
January 18th**

## **Hello, Families!**

Welcome to **Learn Along Bingo!** We're happy to share PBS KIDS activities with you and to work with PBS member stations and community partners across the country to help support learning at home. With Learn Along Bingo, children can view, explore, and play as they learn alongside their PBS KIDS friends on the PBS KIDS 24/7 channel. We hope your family will use it to inspire learning each and every day.

### **It's Lights and Shadows Week!**

In this packet, there are printable activities and everyday learning ideas for you and your child to choose from. As you complete each square, mark it off to celebrate the learning.

### **Learning Spotlight: Shadows**

This week, we're investigating light and shadows. We will learn that some materials block light creating a dark shadow on any surface beyond them, where the light cannot reach.

### **Show What You Know: Moon Journal Activity**

The last activity in this packet is a perfect way for children to learn that the moon doesn't actually change shapes.

**Tune in:** Watch HERO ELEMENTARY at 8pm on Tuesday, January 19th on the PBS KIDS 24/7 channel.

Ready for more? Watch your favorite PBS KIDS shows on the 24/7 channel and live stream at [pbskids.org/video/livetv](https://pbskids.org/video/livetv) or on your local PBS station.

**Happy learning!**  
**PBS KIDS**



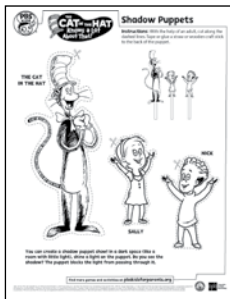
**Find free activities, articles and tips to support at-home learning on [pbskidsforparents.org](https://pbskidsforparents.org)**

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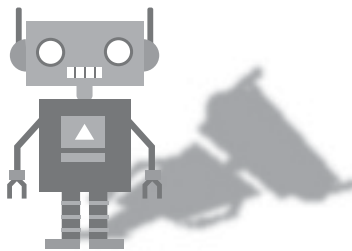


# Light and Shadows

## BINGO



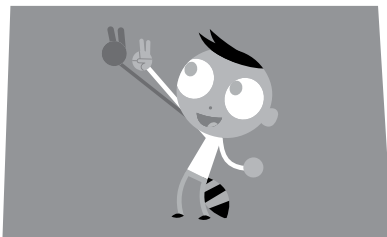
**Stick Puppet  
Shadow Play**



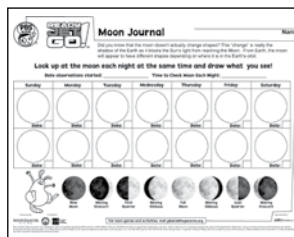
**Explain to someone  
what a shadow is.**



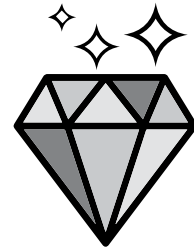
**Shadow Cards**



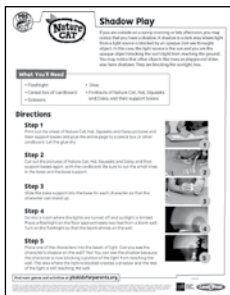
**Practice making shadow  
puppets with your hands.**



**Moon Journal**



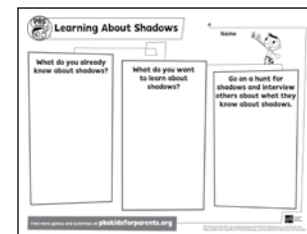
**Collect objects that  
reflect light and make  
an art project.**



**Shadow Play**



**Make a list of any light  
sources in your house.**



**Learning About Shadows**

**Grades 1-2**

**Find more games and activities at [pbs.org/parents/learn-at-home](https://pbs.org/parents/learn-at-home)**



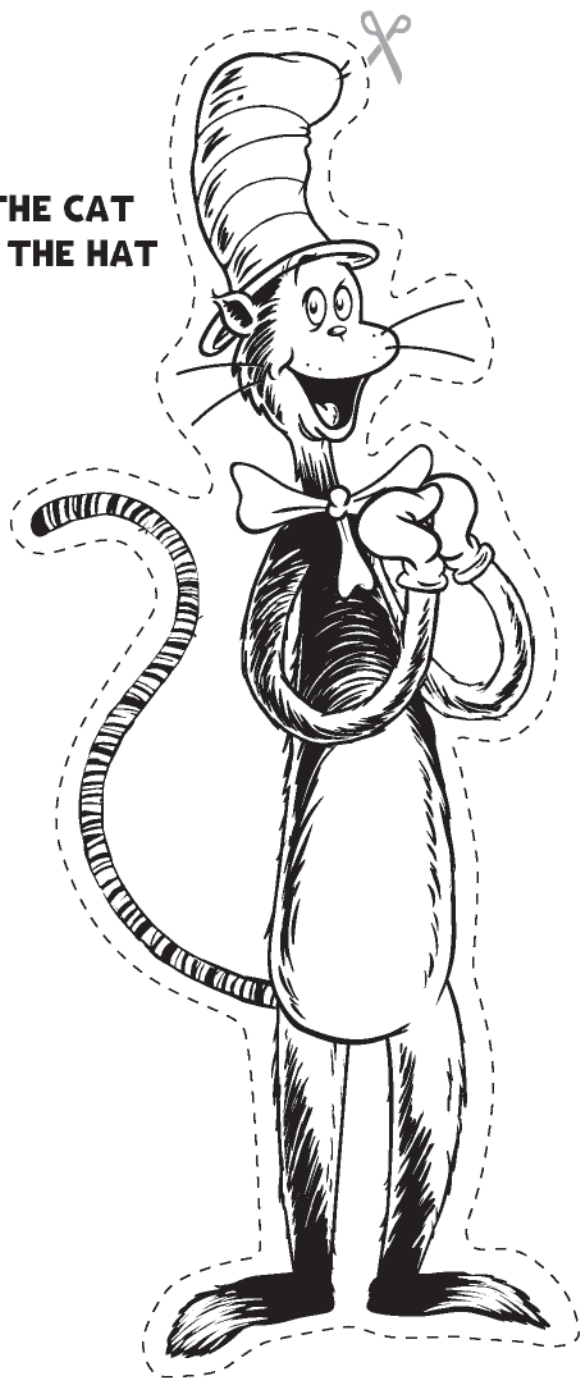
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## Shadow Puppets

**Instructions:** With the help of an adult, cut along the dashed lines. Tape or glue a straw or wooden craft stick to the back of the puppet.

**THE CAT  
IN THE HAT**



**SALLY**



**NICK**

**You can create a shadow puppet show! In a dark space (like a room with little light), shine a light on the puppet. Do you see the shadow? The puppet blocks the light from passing through it.**

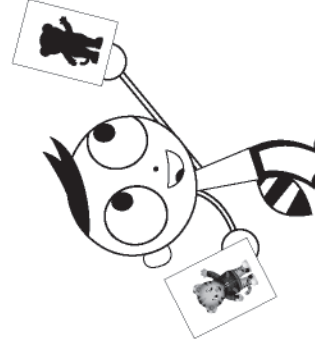
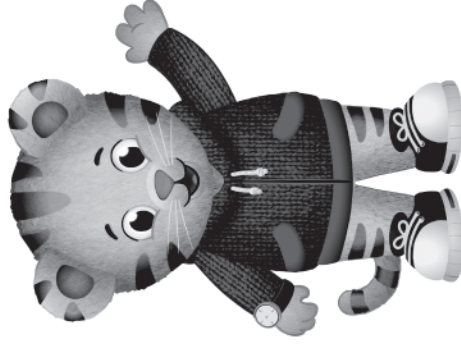
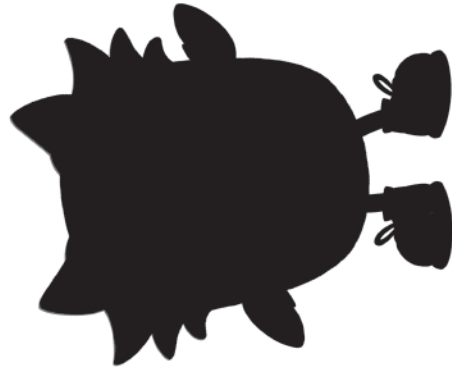
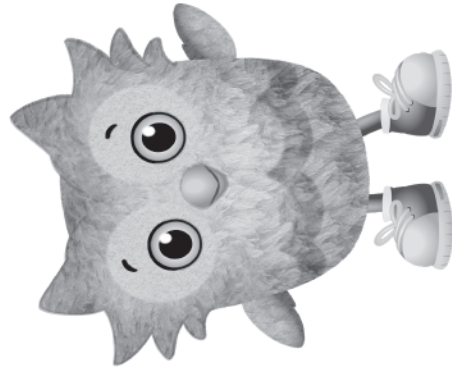
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## Shadow Cards

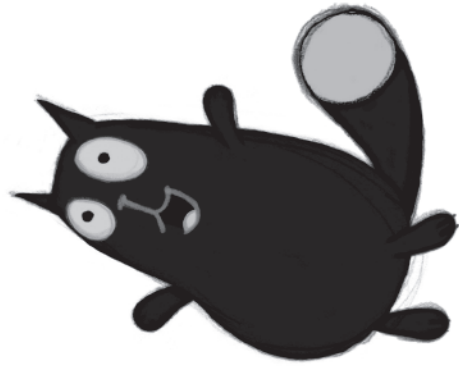
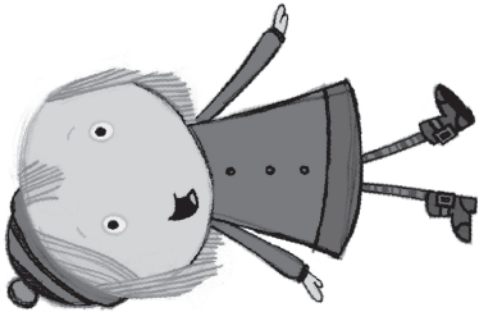
**Instructions:** Cut along the dotted lines. Invite someone to play a matching game with you. Place the cards face down on a flat surface. Choose two as you work to match the PBS KIDS characters to their shadows. If you find a pair, keep the cards. If you do not find a pair, turn the cards over in their place. Then, try again until you all find ten pairs. How many pairs did each player find? What strategy did you use to match the characters with their shadows?



Find more games and activities at [pbskidsforparents.org](http://pbskidsforparents.org)

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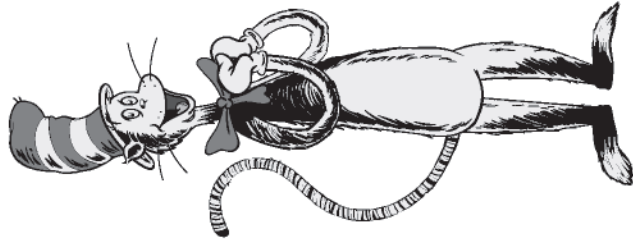
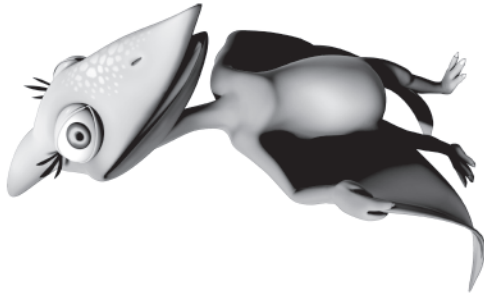
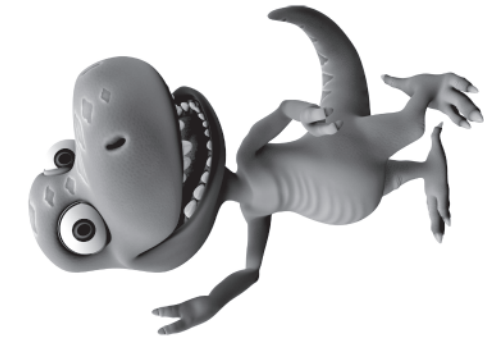


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# Shadow Play

If you are outside on a sunny morning or late afternoon, you may notice that you have a shadow. A shadow is a dark area where light from a light source is blocked by an opaque (not see through) object. In this case, the light source is the sun and you are the opaque object blocking the sun's light from reaching the ground. You may notice that other objects like trees or playground slides also have shadows. They are blocking the sunlight, too.

## What You'll Need

- Flashlight
- Cereal box of cardboard
- Scissors
- Glue
- Printouts of Nature Cat, Hal, Squeeks and Daisy and their support bases.

## Directions

### Step 1

Print out the sheet of Nature Cat, Hal, Squeeks and Daisy pictures and their support bases and glue the entire page to a cereal box or other cardboard. Let the glue dry.

### Step 2

Cut out the pictures of Nature Cat, Hal, Squeeks and Daisy and their support bases again, with the cardboard. Be sure to cut the small lines in the base and the base support.

### Step 3

Slide the base support into the base for each character so that the character can stand up.

### Step 4

Go into a room where the lights are turned off and sunlight is limited. Place a flashlight on the floor approximately two feet from a blank wall. Turn on the flashlight so that the beam shines on the wall.

### Step 5

Place one of the characters into the beam of light. Can you see the character's shadow on the wall? Yes! You can see the shadow because the character is now blocking a portion of the light from reaching the wall. The area where the light is blocked creates a shadow and the rest of the light is still reaching the wall.



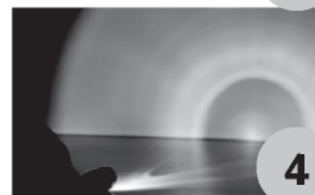
1



2



3



4



5

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# Shadow Play

## Directions continued

### Step 6

Place a second character between the flashlight and the wall. Can you see both of their shadows? Now try moving one character closer to the flashlight and leaving another character closer to the wall. You will see that the character closer to the flashlight has a bigger shadow. The character further from the flashlight and closer to the wall will have a smaller shadow. This is because the character closer to the flashlight is blocking more of the light from the flashlight and letting less light pass by to reach the wall.



### Step 7

Experiment with other light sources. What happens if you have a larger or smaller flashlight? What shadows can you see from an overhead light? What shadows can you see if you take the characters out in the sun during the morning or afternoon? Can you make the shadows bigger or smaller based on where they are in comparison to the light source?



### Step 8

Use the characters to put on a shadow play. You can move the characters closer to or further from the light to show them coming towards something or walking away from something.

#### TALLY HO!

Cut out the pictures of Nature Cat, Hal, Squeeks and Daisy and their support bases. Be sure to cut the small lines in the character base and the base support. Slide the base support into the base for each character so that the character can stand up.



Find more games and activities at [pbskidsforparents.org](https://pbskidsforparents.org)

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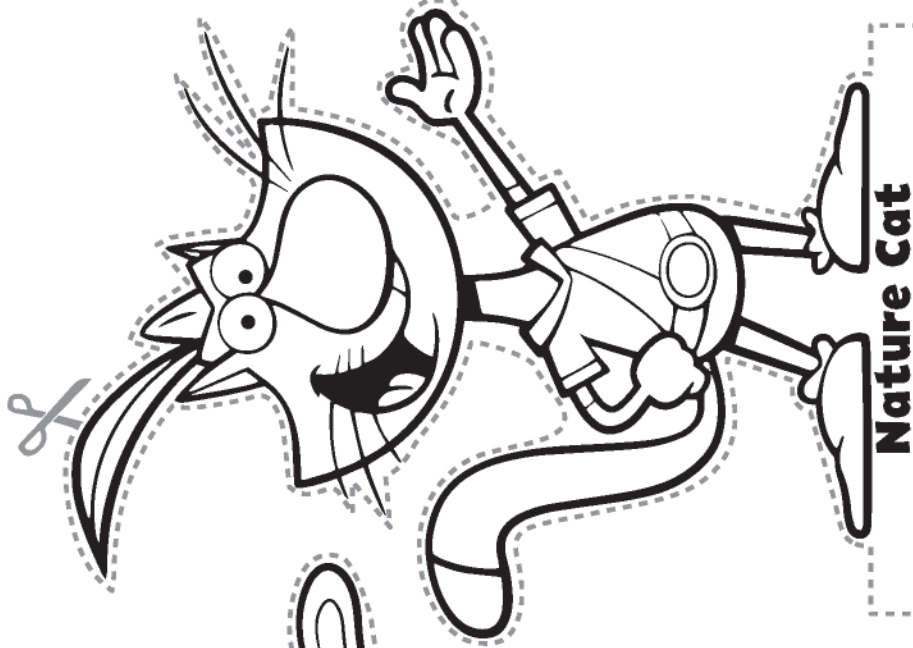


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# Shadow Play Characters



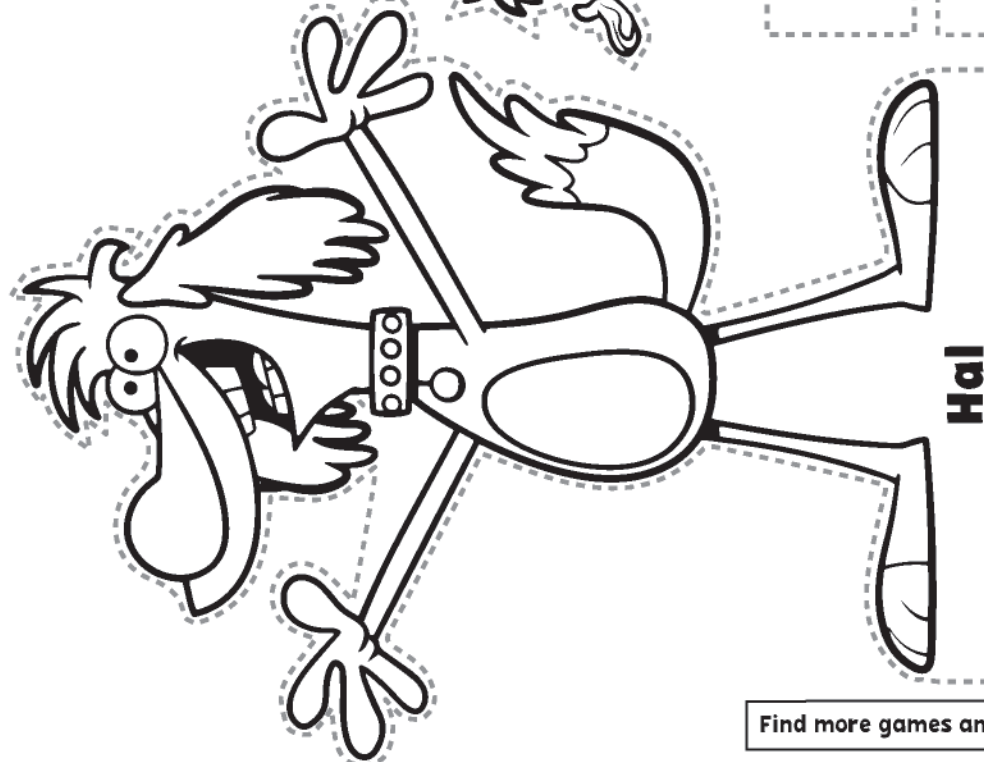
Nature Cat



Daisy



Squeeks



Hal

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# Learning About Shadows

Name \_\_\_\_\_



**What do you already  
know about shadows?**

**What do you want  
to learn about  
shadows?**

**Go on a hunt for  
shadows and interview  
others about what they  
know about shadows.**

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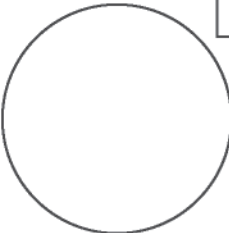
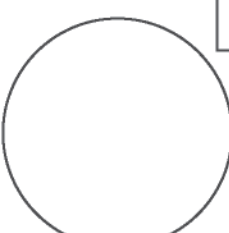
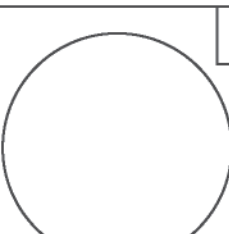
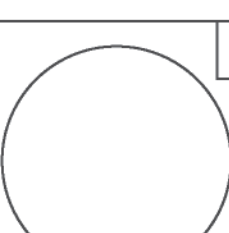
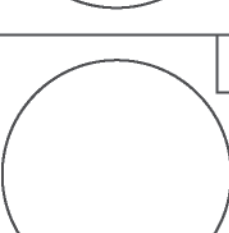
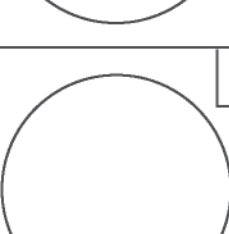

# Moon Journal

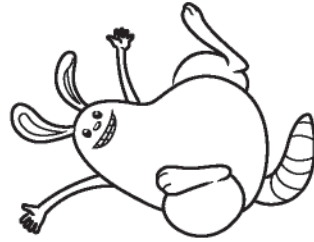
Name \_\_\_\_\_

Did you know that the moon doesn't actually change shapes? This "change" is really the shadow of the Earth as it blocks the Sun's light from reaching the Moon. From Earth, the moon will appear to have different shapes depending on where it is in the Earth's orbit.

**Look up at the moon each night at the same time and draw what you see!**

Date observations started: \_\_\_\_\_ Time to Check Moon Each Night: \_\_\_\_\_

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
 Date: _____	 Date: _____	 Date: _____	 Date: _____	 Date: _____	 Date: _____	 Date: _____



New Moon



Waxing Crescent



First Quarter



Waxing Gibbous



Full Moon



Waning Gibbous



Last Quarter



Waning Crescent

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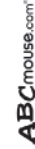


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# Learn at Home with PBS KIDS

**Schedule Begins October 5, 2020**

Explore reading, math, science, life lessons, and more on the PBS KIDS 24/7 channel and live stream! The TV schedule below offers you and your child a chance to learn anytime alongside your favorite PBS KIDS characters.



TIME (M-F)	SHOW	GRADE	LEARNING GOAL
6/5c am	Splash and Bubbles	PK-K	Science
6:30/5:30c am	WordWorld	PK-K	Literacy
7/6c am	Peg + Cat	PK-K	Math
7:30/6:30c am	Peep and the Big Wide World	PK-K	Science
8/7c am	Sid the Science Kid	PK-K	Science
8:30/7:30c am	Super WHY!	PK-K	Literacy
9/8c am	Pinkalicious & Peterrific	PK-1	The Arts
9:30/8:30c am	Clifford the Big Red Dog	PK-K	Social & Emotional Learning, Literacy
10/9c am	Let's Go Luna!	K-2	Social Studies
10:30/9:30c am	Dinosaur Train	PK-K	Science
11/10c am	The Cat in the Hat Knows a Lot About That!	PK-1	Science & Engineering
11:30/10:30c am	Martha Speaks	K-2	Literacy
12 pm/11c am	Nature Cat	K-3	Science
12:30 pm/11:30c am	Ready Jet Go!	K-2	Science & Engineering
1/12c pm	Arthur	K-2	Social & Emotional Learning
1:30/12:30c pm	Odd Squad	K-2	Math
2/1c pm	Cyberchase	1-5	Math
2:30/1:30c pm	Molly of Denali	K-2	Literacy
3/2c pm	Pinkalicious & Peterrific	PK-1	The Arts
3:30/2:30c pm	Elinor Wonders Why	PK-K	Science & Engineering
4/3c pm	Sesame Street	PK-K	Literacy, Math, Social & Emotional Learning
4:30/3:30c pm	Daniel Tiger's Neighborhood	PK-K	Social & Emotional Learning
5/4c pm	Curious George	PK-K	Math, Science & Engineering
5:30/4:30c pm	Curious George	PK-K	Math, Science & Engineering
6/5c pm	Wild Kratts	K-2	Science
6:30/5:30c pm	Wild Kratts	K-2	Science

**Access FREE, at-home learning activities, tips, and more on [pbskidsforparents.org](https://pbskidsforparents.org)**

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# Learn at Home with PBS KIDS

Play and learn anytime and anywhere with free apps from PBS KIDS! Use the chart below to find the app that aligns to your child's grade, learning goal, and favorite PBS KIDS show - then download it on your on your mobile or tablet device to play online, offline, or anytime.

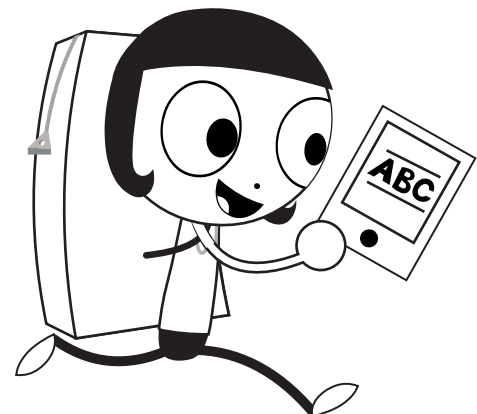
## Apps for Social & Emotional Learning

Daniel Tiger for Parents	PK-K	Social & Emotional Learning
PBS KIDS Games app	K-2	Multiple Learning Goals
PBS KIDS Video app	K-2	Multiple Learning Goals



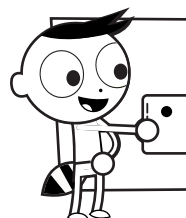
## Apps for Literacy Learning

Dinosaur Train A to Z	PK-K	Literacy, Science
Molly of Denali	K-2	Literacy
PBS KIDS Games app	K-2	Multiple Learning Goals
PBS KIDS Video app	K-2	Multiple Learning Goals



## Apps for STEM Learning (Science, Technology, Engineering & Math)

PBS Parents Play & Learn	PK-K	Literacy, Math	Ready Jet Go! Space Explorer	K-2	Science
Play & Learn Engineering	PK-K	Science and Engineering	Ready Jet Go! Space Scouts	K-2	Science and Engineering
Play & Learn Science	PK-K	Science	Nature Cat's Great Outdoors	K-3	Science
Splash and Bubbles for Parents	PK-K	Science	PBS KIDS ScratchJr	1-2	Coding
Splash and Bubbles Ocean Adventure	PK-K	Science	Outdoor Family Fun with Plum	1-3	Science and Engineering
The Cat in the Hat Builds That!	PK-K	Science and Engineering	Cyberchase Shape Quest	1-5	Math, Science
The Cat in the Hat Invents	PK-K	Science and Engineering	PBS KIDS Games app	K-2	Multiple Learning Goals
Jet's Bot Builder: Robot Games	K-2	Science and Engineering	PBS KIDS Video app	K-2	Multiple Learning Goals
Photo Stuff with Ruff	K-2	Science			



[pbskids.org/apps](https://pbskids.org/apps)

