



# DIGITAL BACKPACK THEARTS













# AT-HOME LEARNING

#### **Dear Parents and Caregivers,**

Academic year 2021 brings with it unprecedented challenges and opportunities for you and your children. PBS Kids and the Cade Museum for Creativity and Invention are here to help!

Congratulations on creating innovative ways to make learning at home fun and exciting, and now we invite you to make us your home education partners.

We are thrilled to offer this new digital backpack filled with activities, resources, curriculum, and experiments, designed to engage and ignite young minds in dynamic new ways.

#### Let's unpack some of the digital backpack's key resources:

- State standards guide for families
- Family reading list
- Printable hands-on activities
- PBS KIDS programming learning goals and reflection guide
- STEAM-focused videos from The Cade featuring activities and experiments
- Tips for balancing screen time
- PBS KIDS apps and associated learning goals

To learn more and download PBS Backpacks in added core subjects, visit PBSbackpack.org

To share photos of your family learning with the PBS backpack, or to contact us with questions, email us at **education@wuft.org**. Sign-up for our newsletter at **pbs.org/parents/newsletter**.

Sincerely,

The WUFT Education Team









# Family Arts Learning Guide



To help families understand Creative Arts Learning standards for Kindergarten students, we have prepared this Family Learning Guide with explanations and activities you can do at home with your kids. Doing these types of artistic learning activities promotes creativity and imagination with children. Arts includes visual art, drama/theater, dance, and music.

#### **Creating**

- Part of creating is making art of your own
- Edit, revise, and finish artistic handiwork
- Think up and put together artistic designs
- Organize and develop artistic pieces

#### **Family Tips for At-Home Learning**

- Use recycled materials, like empty cereal boxes or yogurt containers, to create art
- Move beyond the coloring book and give children blank paper to draw, color, or paint
- Dance to music to show kids how to express emotions through movement
- Encourage children to create songs, stories, and poems to detail their everyday life, feelings, and activities

#### Responding

- Responding to art includes viewing and explaining what the artist is trying to express to the audience
- Recognize and judge how the arts show meaning and feelings

#### **Family Tips for At-Home Learning**

- Spend time viewing art and listening to music as a family
- Describe how it makes you feel or what it makes you think of
- Discuss language you can use if you do not like art or music and what you can say to not hurt someone's feelings about their work













#### **Performing, Presenting, Performing**

- Performing, presenting, and producing means acting out an existing work and encouraging the use of interpretive or re-creative skills of the student
- Performing (dance, music, theatre): Bringing out artistic ideas and work through interpretation and presentation
- Presenting (visual arts): Explaining and posting of artistic work
- Producing (media arts): Creating and showcasing artistic ideas and work

#### **Family Tips for At-Home Learning**

- Encourage children to act out stories you read together to retell the story
- Create places for children to act, dance, perform music and showcase artwork for friends and family
- Help children submit written works for contests

#### **Connecting**

- Making connections means combining artistic ideas and pieces with your own thoughts
- Relate artistic work to other art or moments in history, life, and experience.

#### **Family Tips for At-Home Learning**

- Play a game where you find a song, a piece of visual art, and a movie that each make you feel the same emotion
- Recreate a piece of art, story, or a song as a tribute to the original artist, but add your own thoughts and ideas to make it your own
- Select a historical time period and then look up art, music, or theater from that time period. Compare different historical periods and the arts from that time

#### Resources

- National Core Arts Standards
- PBS Parents art crafts and resources
- PBS KIDS coloring games









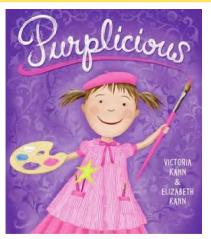
# Family Reading List

THE ARTS



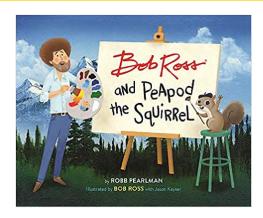
Reading time can be an easy and fun way to reinforce creative art learning at home. Check with your local public library to access these books online or click on the book covers to watch a read aloud of the story.

#### **Purplicious**



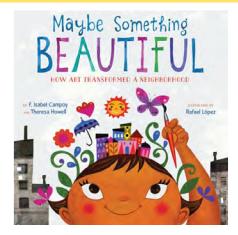
By Victoria Kann Ages: 4 to 8

#### **Bob Ross & Peapod the Squirrel**



By Robb Pearlman Illustrated by Bob Ross and Jason Kayser Ages: 4 to 8

#### **Maybe Something Beautiful**



By F. Isabel Campoy and Theresa Howell Illustrated by Rafael López Ages: 4 to 7

#### Ish



PETER H. REYNOLDS

By Peter H. Reynolds Ages: 5+













## Shape, Size, and Silhouette Surprises

After Nick and Sally get spooked by some shadows, the Cat sheds light on how they are made. Join the fun! Explore shadow science with The Cat in the Hat stick puppets, a flashlight, and your own imagination.

#### **Materials**

- The Cat in the Hat Puppet printables
- Cardstock or paper
- Straws or wooden craft sticks (6)
- Scissors

- Tape
- Flashlight
- Wax paper (optional)



When playing with shadows, find a dark space with a blank wall. You

might wait for the sun to go down

#### Make the Puppets

- 1. Print The Cat in the Hat Puppets onto cardstock or paper. If using paper, glue printed puppets onto a second sheet of paper to add more strength.
- 2. With an adult's help, cut out the figures. Tape a straw or wooden craft stick to the back of each puppet.

#### **Explore**

- 1. Hold a stick puppet or two in front of the wall.
- 2. Can you create a shadow with the flashlight?

  What if you move the light closer to the puppet or farther away?

  What if you shine the light from high above or down low? What happens?
- 3. Can you make the shadow almost disappear, even while shining the light on it? How did you do that?

#### More Ways to Play

- 1. Now it is your turn to be a puppet! Ask a friend to point a flashlight at you while you make your body, hands, and arms into a shadow figure. A bird? A dinosaur? The Cat in the Hat?
- 2. Chinese shadow puppetry is one of the oldest forms of puppet art. Create your own screen and stage by taping a long piece of wax paper across the bottom of an open door frame. With the help of a friend, hold a stick puppet behind the paper, and then shine a light on it so the paper catches the shadow (the puppet will be between the light and the paper).
- 3. Pretend that it is the Cat—and not the children—who is spooked by the shadows. Have Nick and Sally teach him about shadows using the stick puppets and your flashlight.



Find related games in the FREE
The Cat in the Hat Builds That app.

Download it new!

Download it now

#### pbskids.org/catinthehat













THE CAT IN THE HAT













**SALLY** 



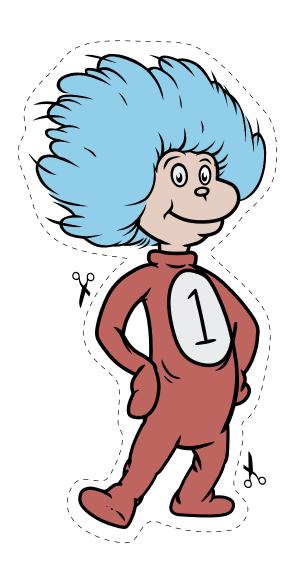




**NICK** 



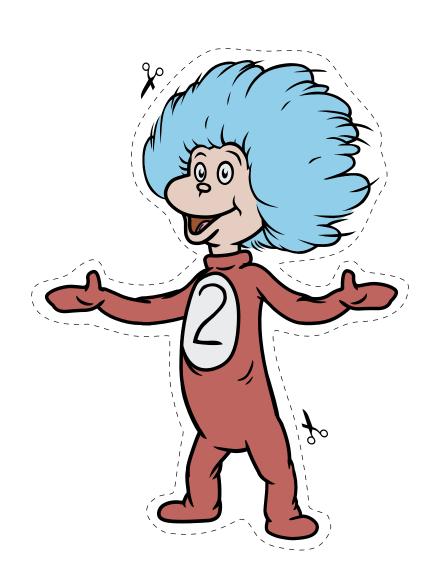




THING ONE







**THING TWO** 



NAME						

# PBS KIDS Episode Reflection Guide Grades Pre-K-2

Directions: Take a moment to reflect on your learning from the PBS KIDS episode you watched. Then answer the questions below.

What did you learn from this episode? Discuss with your child key ideas and details. Briefly explain why these details are important to you, the community, and the world.
How can you connect the learning in this episode to everyday learning at home?  For example, if you watched an episode about counting, you and your child can expand this
learning at home by counting items during daily routines like doing laundry or washing dishes.











# SMART SCREEN TIME® TIPS





# We don't replace reading, we complement reading

Reading is a skill and left untouched for several months, that skill will get weaker! The best part of free time reading is that you get to choose what you want to read!

SORRY!
text messages
and social
media are
typically too
short to call
reading



## Screen zombies are real

state between being awake and being asleep. When you see a zombie, there are two main recommendations: if it's not bedtime, tell the zombie to turn off the screen and do something active.

And if it is bedtime, go to bed!

## Find your balance



strategy.

Screens can be used for things
that are BOTH entertaining
and informative. Find your
balance: watch your movies,
but also write a short story.
Watch an episode of Nature about
cute animals. Design a game.
Video chat your grandparents.



## Adjust your screens at night

We know that bright screens keep people awake—even if the brain and body are tired, bright lights send a strong wake-up signal. After the sun goes down, turn down the intensity of screens.

People with
screens in their
bedrooms sleep
on avg 15 min less
per night. That's
almost 2 hrs less
sleep per week!







## **OUTDOOR EXPLORATION APPS**



**Nature Cat's Great Outdoors** Go on a new adventure every day with the Nature Cat crew as they explore, discover and observe nature in their own backyard and beyond! Kids can observe the daily weather and use a compass, camera, sound recorder and journal to record each nature adventure. **FREE** 



**Ready Jet Go! Space Explorer** Kids can explore the solar system and visit planets, stars and constellations with Jet and his friends. Go on a galactic journey with Jet, Sydney, Sean, Mindy and Sunspot from their backyard in Boxwood Terrace through space! FREE



Wild Kratts Baby Buddies Join Martin, Chris, and the Wild Kratts team on an African Savannah creature sitting adventure. These baby animals need a lot of attention and care, and with Wild Kratts Baby Buddies app, kids are in charge of feeding, washing, protecting and playing with each one.



**Splash and Bubbles Ocean Adventure** Join Splash, Bubbles, Dunk, and Ripple on a journey to the world's undersea habitats. Kids will discover the creatures that live there, learn about many different plants and animals, and build and decorate their very own ocean!



Wild Kratts World Adventure Kids can tilt and tap their way through six multi-level games that encourage exploration of habitats around the world. Focusing on science, each game lets kids observe, explore and use creature power suits to complete missions and help the Kratt Brothers.



Outdoor Family Fun with Plum Get ready for some Outdoor Family Fun with Plum! This app offers daily activities that get families outside, exploring their neighborhood and learning about nature. Spending time outdoors has many benefits and nature is all around – you just have to look! FREE



Photo Stuff with Ruff In this camera-based experience, children learn about science by taking pictures of different materials to complete silly scenes. Play it together and record and share your observations in fun, creative ways! FREE

Look for more APPS for iOS and Android at pbskids.org/apps

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# **PBS KIDS Learning Goals**



#### **SOCIAL & EMOTIONAL LEARNING**

Daniel Tiger's Neighborhood	2-4	Social & Emotional Learning
Sesame Street	2-5	Social & Emotional Learning, Literacy, Math, Spanish
Clifford the Big Red Dog	3-5	Social & Emotional Learning
Mister Rogers' Neighborhood	3-6	Social & Emotional Learning
Arthur	4-8	Social & Emotional Learning, Social Studies
Xavier Riddle and the Secret Museum	5-8	Social & Emotional Learning
Xavier Riddle and		

## **LITERACY**

5 A 11		
MOL	y of D	enall
Medi		CHUMIL
	<b>—</b>	

Literacy (Informational Text)

## **SOCIAL STUDIES, THE ARTS & MORE**

Pinkalicious & Peterrific	3-6	The Arts, Creative Expression
Let's Go Luna!	4-7	Social Studies (World Cultures and Geography)
Digital-Only		
Kart Kingdom	3-6	Systems Thinking
Oh Noah!	4-8	Spanish, Cultural Awareness

### **STEM** (Science, Technology, Engineering & Math)

Curious George	3-5	Science Inquiry, Engineering, Math
Elinor Wonders Why	3-5	Science Inquiry, Life/Earth Science, Engineering & Technology
The Cat in the Hat Knows a Lot About That!	3-6	Science Inquiry, Life/Earth/Physical Science, Engineering & Technology
Dinosaur Train	3-6	Science Inquiry, Life/Earth Science
Nature Cat	3-7	Life/Earth Science
Wild Kratts	4-8	Science Inquiry, Life Science
Hero Elementary	4-8	Science Inquiry, Life/Earth & Space/Physical Science, Engineering & Technology
Odd Squad	5-8	Math
Ready Jet Go!	5-8	Science Inquiry, Earth & Space/Life/Physical Science, Engineering & Technology

#### **Digital-Only**

The Ruff Ruffman Show	4-8	Science Inquiry, Physical Science, Engineering & Technology
Design Squad Nation	4-8	Science Inquiry, Physical Science, Engineering
PBS KIDS Scratch Jr	5-8	Computational Thinking
SciGirls	6-8	Science Inquiry, Life/Physical/Earth Science, Engineering & Technology, Math



# **STEAM Experiment & Activity Videos**

Each of these STEAM videos, created by the educators and innovators at the Cade Museum for Creativity and Invention in Gainesville, is your child's hall pass to an exciting world of science, technology, creativity, and exploration. Videos feature hands-on experiments, and are accompled by supply lists, and lesson plans, aligned with Florida's C-Palms and Next Generation Science Standards (NGSS).

## **EARTH & SPACE SCIENCE**

LAR	H & SPACE SCIENCE	
Comets at	he Cade/Space Travel & Colonization 6+ See video at PBSbackpac	k.org/EarthSpace
Educational Standards	C-Palms Observe and describe water in its solid liquid and gaseous states.  NGSS Construct an argument with evidence that some changes caused by heating and cooling can be reversed and some cannot.	
Expanding	alaxy/Space Travel & Colonization 6+ See video at PBSbackpac	k.org/EarthSpace
Educational Standards	Palms Discover how materials can be altered to change some of their properties, while not all materials respond the same way to any one alteration.  NGSS Investigate and evaluate experimental designs to provibetween objects exerting forces on each other even the	
Birth of a l	ebula/Space Travel & Colonization 6+ See video at PBSbackpac	k.org/EarthSpace
Educational Standards	Palms Identify the Sun as a star that emits energy, some in the form of light.  NGSS Support an argument that differences in the apparent bright stars is due to their relative distance from Earth.	ntness of the sun compared to other
Rocket/Sp	re Travel & Colonization 4+ See video at PBSbackpac	k.org/EarthSpace
Educational Standards	Palms Recognize that objects are pulled towards the ground unless something holds them up.  NGSS Make observations or predictions on an object to provide a used to predict future motion.	evidence that a pattern can be
TAN	HEMATICS & DESIGN	
Moving Cha	acter in Scratch/Codes: Designs & Patterns 10+ See video at PBSbackpack.	org/MathematicsDesign
Educational St	dards C-Palms Explain that computers model intelligent behavior. NGSS Optimize design solution.	
	Measurements & Calculations 10+ See video at PBSbackpack.	
Educational St		
Educational	sic: Acoustics/Wave  10+ See video at PBSbackpack.  C-Palms Evaluate different file types for different purposes.  NGSS A situation people want to change or create can be a	
Standards	problem to be solved through engineering.	
	& Patterns: Agriculture/Life Sciences 10+ See video at PBSbackpack.	org/MathematicsDesign
Animational St		ova /MathomaticaDosian
Educational	odes: Design & Patterns  10+ See video at PBSbackpack.  C-Palms Evaluate different file types for different purposes.  NGSS A situation people want to change or create can be a problem to be solved through engineering.	
	E & MOTION	
House (Leg	/Structural Design 5+ See video at PBSbackpac	k.org/ForceMotion
	pp/Who's Hot/Simple Mechanics  6+ See video at PBSbackpac	k.org/ForceMotion
Educational Standards	C-Palms Explore the law of gravity by demonstrating that gravity NGSS Each force acts on one particular object and has bot is a force that can be overcome.	
		k over/Coverbletion
Educational	C-Palms Explore the law of gravity by demonstrating that gravity NGSS Objects in contact exert forces upon each other.	k.org/ Porcemotion
Standards	is a force that can be overcome.	
Educational	ulsion & Locomotion  6+ See video at PBSbackpac  C-Palms Identify some basic forms of energy such as light, heat, NGSS  Pushes and pulls can have different strengths and di	
Standards	sound, electrical, and mechanical.	
Newton's 2  Educational St	d Law of Motion/Propulsion & Locomotion  6+ See video at PBSbackpac  G-Palms Investigate the effect of applying various pushes and pull on different objects.  NGSS	
		Defining Engineering Problems.
Educational	-Palms Recognize that objects are pulled toward the NGSS For any pair of interacting objects, the force of the first object exe	rted on the second object is equal to t
Standards	ground unless something holds them up. strength of the second object that exerts on the first but in the op	
Newton's 1  Educational	Law of Motion/Propulsion & Locomotion  6+ See video at PBSbackpac  C-Palms Identify familiar forces that cause objects to move, such as pushes  NGSS Cause-and-effect relationships are routil	
Standards	and pulls, including gravity acting on falling objects.	
	v Defenders/Propulsion & Locomotion 6+ See video at PBSbackpac	
Educational Standards	<b>C-Palms</b> Evaluate different file types for different purposes. <b>NGSS</b> For any pair of interacting objects, the force of the first object exerted strength of the second object that exerts on the first but in the opposi	



# STEAM Experiment & Activity Videos

## ECTRICIT

#### Electrolyte Ball Science Fun/Electrical Systems & Circuits

6+

See video at PBSbackpack.org/Electricity

Educational

**C-Palms** 

Recognize and explore how cells of all organisms undergo similar process to maintain homeostasis, including extracting energy.

NGSS

All living things are made up of cells, said to be the smallest living unit.

## SCIENCE

#### **Reaction Time/Homeostasis**

6+

See video at PBSbackpack.org/LifeScience

Educational

C-Palms

Recognize and explore how cells of all organisms undergo similar process to maintain homeostasis, including extracting energy.

NGSS

Use a model to test interactions concerning the func-

Pickles In America/Friend & Foe, or Germs!/Agriculture

6+

See video at PBSbackpack.org/LifeScience

Educational **Standards** 

**C-Palms** 

Investigate and describe the many physical and chemical changes affected by temperature

NGSS

Explore how food moves through a series of chemical reactions within individual organisms

## NERG

#### Air Conditioned Shoulder Pads/Heating & Cooling

6+

See video at PBSbackpack.org/Energy

Educational

C-Palms

Describe the changes water undergoes when it changes state, through heating and cooling, my using familiar scientific terms such as melting, freezing, boiling, evaporation, and condensation.

NGSS

Every human-made product is designed by applying some knowledge of the natural world, and is built using materials from the natural world.

#### Shoulder Pads, Reaction Time/Heating & Cooling

See video at PBSbackpack.org/Energy

Educational Standards

**C-Palms** 

Recognize that animals including humans use energy from food.

NGSS

Every human-made product is designed by applying some knowledge of the natural world, and is built using materials from the natural world.

#### Who's Hot/Heating & Cooling

6+

See video at PBSbackpack.org/Energy

Educational

C-Palms

Investigate and explain that electrical energy can be transformed into heart, light, and sound energy as well as the energy of motion.

NGSS

Make measurements and observation of materials based

Batteries, Stored Power/Conversions: Electrical Systems & Circuits

6+

See video at PBSbackpack.org/Energy

Educational Standards

C-Palms Identify and classify materials that conduct electricity and materials that do not

NGSS Energy can be transferred in various ways between objects.

#### Marion Donovan & Floaters/Materials Science Engineering

6+

See video at PBSbackpack.org/Matter

Educational Standards

Changes in Matter can occur physically or chemically

NGSS

Make observations to construct an evidence-based account of how an object is made of a small set of pieces can be disassembled and made into a new object.

#### Sidewalk Chalk/Materials Science Engineering

4+

See video at PBSbackpack.org/Matter

Educational Standards

**C-Palms** 

Investigate and describe that many physical and chemical changes are affected by temperature.

NGSS

Cause-and-effect relationships may be used to predict phenomena in natural

#### Making Toothpaste/Materials Science Engineering

5+

See video at PBSbackpack.ora/Matter

See video at PBSbackpack.org/Matter

See video at PBSbackpack.org/Matter

Educational Standards

**C-Palms** 

Observe and describe water in its solid and liquid and gaseous states.

NGSS

When two or more substances are mixed, a new substance with different properties may be formed.

#### Popsicle: How Cool?/State of Matter

4+

Educational Standards

C-Palms

Investigate and describe that many physical and

NGSS

Analyze testing using different materials

#### Fizzing Cade Dust/Releasing of Stored Energy

6+

C-Palms

Compare physical and chemical changes in matter.

NGSS

When two or more different substances are mixed, a new substance with different properties may be formed.



The mission of The Cade Museum is to transform communities by inspiring and equipping future inventors, entrepreneurs, and visionaries.

For even more resources, sign up for our e-newsletter at pbs.org/parents/newsletter.

To learn more and download PBS Backpacks in added core subjects, visit PBSbackpack.org. To contact us with questions, suggestions, or to share photos of your family learning with the digital backpack, email us education@wuft.org.

The WUFT Education Team





# APP LEARNING GOALS



#### FOR KIDS 2-8



Free learning games with your favorite **PBS KIDS characters** anytime, anywhere!



Thousands of free videos from PBS KIDS, the #1 educational media brand for kids.

#### **SOCIAL EMOTIONAL DEVELOPMENT**

Daniel Tiger's For Parents 2-5

**Social Emotional Development** 

#### LITERACY

Dinosaur Train A to Z

3-6 Literacy

Molly of Denali

**Informational Text** 

## **ARTS, CREATIVITY AND MORE**

PBS KIDS Kart Kingdom	4-8	Creativity
PBS KIDS Party	4-8	Healthy Habits
PBS KIDS Stickers	4-8	Creativity iOS only
Plum's Creaturizer	6-9	Creativity

## **STEM** (Science, Technology, Engineering & Math)

Cyberchase 3D Builder	6-9	Math	
Cyberchase Shape Quest	6-9	Math — Geometry	
Dinosaur Train Classic in the Jurassic Jr.	3-6	Math	
Fetch! Lunch Rush	4-8	Math	iOS only
Jet's Bot Builder: Robot Games	4-8	Space Science	
Nature Cat's Great Outdoors	6-8	Earth Science	
Outdoor Family Fun with Plum	6-9	Nature, Life Science	
PBS KIDS Measure Up!	2-5	Math	
PBS KIDS ScratchJr	5-8	Coding	
PBS Parents Play & Learn	2-5	Math, Literacy	
Photo Stuff with Ruff	4-8	Material Science	
Play & Learn Science	2-5	Weather	
Plum's Photo Hunt	6-9	Life Science, Nature	iOS only
Plum's Creaturizer	6-9	Life Science	iOS Only
Ready Jet Go! Space Explorer	4-8	Space Science	
Ready Jet Go! Space Scouts	4-8	Space Science	
The Cat in the Hat Builds That!	3-5	Science Inquiry, Engineering	









# APP LEARNING GOALS





#### SOCIAL EMOTIONAL DEVELOPMENT

Daniel Tiger's Day & Night	2-5	Social Emotional Development — Routines
Daniel Tiger's Grr-ific Feelings	2-5	Social Emotional Development — Feelings
Daniel Tiger's Stop & Go Potty	2-5	Social Emotional Development — Potty Training
Daniel Tiger's Neighborhood: Play at Home with Daniel	3-5	Social Emotional Development
Daniel Tiger's Storybooks	2-5	Social Emotional Development

# **STEM** (Science, Technology, Engineering & Math)

Odd Squad: Blob Chase	6-8	Math	
Peg + Cat: The Tree Problem	3-6	Math	
Splash and Bubbles Ocean Adventure	4-7	Ocean Science	
Wild Kratts Baby Buddies	4-8	Social Emotional Learning, Animal Science	
Wild Kratts Creature Math	48	Math	iOS only
Wild Kratts Rescue Run	4-8	Animal Science	
Wild Kratts World Adventure	4-8	Animal Science	

#### **LITERACY**

SUPER WHY! ABC Adventures	3-6	Literacy
Super Why! Phonics Fair	3-6	Literacy
Super Why! Power to Read	3-6	Literacy

## **ARTS, CREATIVITY & MORE**

Pinkalicious Party 4-6 Creative Process, Art, Design, Creativity, Roleplaying, Music



