AT-HOME LEARNING

DIGITAL BACKPACK

MATH

PBS SoCal

PBS Kids

WFSU Public Media
Dear Parents and Caregivers,

For the last few months, your kids have been at home from school, giving you the added responsibility of creating educational experiences at home. We applaud you for finding creative ways to make sure learning is always fun and exciting.

Running out of ideas? We're here to help! We've expanded our At-Home Learning service to keep your children learning all summer long with a new digital backpack designed to help students have fun while learning at home.

The resources inside this digital backpack include:

- State standards guide for families
- Family reading list
- Printable hands-on activities
- Tips for balancing screen time
- PBS KIDS programming learning goals and reflection guide
- PBS KIDS apps and associated learning goals

Want more resources? Sign up for our e-newsletter at wfsu.org/education. To get free bilingual resources sent directly to your phone, text WFSU to 27448.*

Feel free to reach out to us with questions. We would love to see photos of families learning with the digital backpack! E-mail us at education@wfsu.org.

The WFSU Education Team

*Standard message and data rates apply. You may opt-out of these messages at any time by texting STOP to 27448.
To help families understand Common Core standards for Kindergarten math, we’ve prepared this Family Math Guide with explanations and activities you can do at home with your kids to make learning math fun and exciting. Doing these types of fun math activities at home, helps students learn early math skills while making connections between math and real life.

**Counting and Cardinality**

**Tip:** Cardinality refers to the total number/quantity in a set or group. Children need to learn that the last number word spoken represents the entire amount counted.

Early math skills:
- Count to 100 by ones
- Skip count to 100 by 10s
- Count forward without starting at 1
- Compare numbers between 0 and 10
- Understand that the next number in the counting sequence is one more than the last number
- Use terms like ‘more than,’ ‘less than’ & ‘equal to’
- Write and draw all numbers from 0-20
- Match written number to the counting number

**Family Tips for At-Home Learning**
- Encourage children to count and call out numbers when counting items during everyday routines like laundry, washing dishes, or cleaning up around the house
- Ask children to count cars, buildings and birds that fly by when you are riding in the car
- Create matching cards by writing numbers on a piece of paper and cutting them out. Then look in newspapers, magazines or books to find items that match the numbers

**Operations & Algebraic Thinking**

**Tip:** Operations are putting together and taking apart numbers. Children need to learn that addition is putting together and adding to and subtraction is taking apart and taking from. Algebraic thinking means seeing patterns, figuring out relationships with numbers, and explaining how numbers change.

Early math skills:
- Use objects or drawings to record number sentences and equations
- Add and subtract numbers 0-10
- Use numbers 1 through 9 to make 10
- Demonstrate addition and subtraction by using their fingers, objects, drawings, and verbal explanations
- Solve addition and subtraction word problems
- Show more than one way to make numbers

**Family Tips for At-Home Learning**
- Feature family members and pets into word problems. (There are three people at the table and two more people joined. How many people are at the table now?)
- Sing math songs such as “Four Little Monkeys Jumping on the Bed” and turn them into math problems. (If there are five monkeys jumping on the bed and one falls off, how many monkeys are left on the bed?)
- Place 5 coins out on the table and have children count and write down the total. Add two more coins and help children write out the number sentence (5 coins + 2 coins = 7 coins). You can use other items like spoons, cookies or beans
**Numbers & Operations in Base 10**

Early math skills:
- Add and subtract numbers 11-19
- Use pictures to write number sentences
- Break apart numbers into tens and ones

**Family Tips for At-Home Learning**
- Practice math problems that use numbers 11-19
- Encourage your child to draw pictures that depict the math problem
- Have children act out the number sentence (Mom gave you 11 flowers. Grandma gave you 5 more flowers. How many flowers do you have now?)

**Measurement and Data**

Early math skills:
- Describe & compare measurable attributes
- Classify, sort and count items
- Describe weight and length, using terms like ‘more of’ and ‘less of’ to describe differences

**Family Tips for At-Home Learning**
- Ask children to describe the weight of cans of food, bags of dried beans, and other ingredients while you are preparing dinner. Have them sort the items from heaviest to lightest
- Have children sort a handful of coins by type and arrange them in order of their worth. You could also have your kids do this with books and arrange them in order of height or thickness or with pots and pans and arrange them in order of size
- Compare heights and hair lengths of family members. Who is the tallest? Who has the longest hair? Who has the shortest hair?

**Geometry**

Early math skills:
- Describe the shapes of household objects and items they see around them
- Name shapes regardless of size, direction and position
- Analyze, compare and create shapes
- Turn simple shapes into larger shapes
- Identify two-dimensional or flat shapes
- Identify three-dimensional or solid shapes
- Compare and contrast 2D and 3D shapes in different sizes and orientations and talk about their similarities, differences & other attributes
- Model shapes by drawing and building them from clay, sticks or other craft items
- Describe the location and position of objects using words like ‘above,’ ‘below,’ ‘in front of,’ ‘behind’ and ‘next to’

**Family Tips for At-Home Learning**
- Take a Shape Walk around the neighborhood. Point out uniquely shaped items such as stop signs and name them. Search for circles, squares, rectangles, and triangles. Count the number sides and corners of each shape together. Bring along a notebook so that your child can draw each shape they see
- Include words like ‘above,’ ‘below,’ ‘in front,’ ‘behind’ and ‘next to’ when you describe shapes and their relative positions. You can also practice these words by asking questions like, “Is the dog behind or in front of the fence?” and “Is the ball under or on top of the table?”
Reading time can be an easy and fun way to introduce and reinforce early math concepts like counting, measuring and shapes. 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.

**Sometimes We Do**  
Written by Omo Moses  
Illustrated by Diego Chaves  
Ages: 3 to 5

**Round is a Tortilla**  
Written by Roseanne Greenfield Thong  
Illustrated by John Parra  
Ages: 3 to 5

**Ten Black Dots**  
By Donald Crews  
Ages: 4 to 8

**Inch by Inch**  
By Leo Lionni  
Ages: 3 to 7
All official Odd Squad Agents have their own badge. Create yours by completing these steps:

1. Use the Find Your Badge Number activity sheet to decode your name and calculate your official agent number.

2. Add your number between the stars on the badge above.

3. Color your own personal Odd Squad Badge.

4. Glue this page to thick paper or cardboard. Cut out your badge.

5. Now you are ready to flash your badge!

Color and Cut!
Figure Out Your Agent ID Number!

Odd Squad agents have a special number on their badges. The number comes from the letters in the agent’s name. How does it work? Just follow these steps to find your own agent number.

Decode Your Name!

For example, if your name is Max, you would decode your name like this:

M = 13   A = 1   X = 24

Add Up the Numbers!

13 + 1 + 24 = 38

Max's badge number is 38. To make it official, each agent would add the letter “O” to the front of his or her name, like this: Agent O'Max, #38.

Now do this for your name and join Odd Squad!
Find the Hidden Jackalopes.

There are ten hidden jackalopes in this drawing. Can you spot them all?

Find the Hidden Jackalopes.
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.

After watching this episode, what do you want to learn more about?
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!

Screen zombies are real

Screen zombies are in a halfway 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

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. WhatsApp 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.

SMART SCREEN TIME® TIPS from Austin PBS

People with screens in their bedrooms sleep on avg 15 min less per night. That’s almost 2 hrs less sleep per week!
<table>
<thead>
<tr>
<th><strong>OUTDOOR EXPLORATION APPS</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Nature Cat's Great Outdoors</strong></td>
</tr>
<tr>
<td><strong>Ready Jet Go! Space Explorer</strong></td>
</tr>
<tr>
<td><strong>Wild Kratts Baby Buddies</strong></td>
</tr>
<tr>
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</tr>
<tr>
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</tr>
<tr>
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</tr>
<tr>
<td><strong>Photo Stuff with Ruff</strong></td>
</tr>
</tbody>
</table>

Look for more APPS for iOS and Android at pbskids.org/apps
## 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
- **Caillou** 2-5 Social & Emotional Learning
- **Esme & Roy** 2-5 Social & Emotional Learning
- **Clifford the Big Red Dog** 3-5 Social & Emotional Learning
- **Mister Rogers’ Neighborhood** 3-6 Social & Emotional Learning
- **Arthur** 4-8 Social & Emotional Learning, Social Studies
- **Xavier Riddle 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** 4-8 Literacy (Informational Text)
- **WordGirl** 5-8 Literacy (Vocabulary Acquisition)

### 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)
- **Kart Kingdom** 3-6 Systems Thinking
- **Oh Noah!** 4-8 Spanish, Cultural Awareness

### STEM (Science, Technology, Engineering & Math)
- **Peep and the Big Wide World** 2-5 Science Inquiry, Life/Physical Science, Math 24/7 Channel
- **Splash and Bubbles** 2-5 Scientific Inquiry, Life Science
- **Peg + Cat** 3-5 Math
- **Curious George** 3-5 Scientific Inquiry, Engineering, Math
- **The Cat in the Hat Knows a Lot About That!** 3-6 Scientific Inquiry, Life/Earth/Physical Science, Engineering & Technology
- **Dinosaur Train** 3-6 Scientific Inquiry, Life/Earth Science
- **Sid the Science Kid** 3-6 Scientific Inquiry, Life/Earth/Physical Science, Math 24/7 Channel
- **Nature Cat** 3-7 Life/Earth Science
- **Wild Kratts** 4-8 Scientific Inquiry, Life Science
- **Cyberchase** 4-8 Math
- **Odd Squad** 5-8 Math
- **Ready Jet Go!** 5-8 Scientific Inquiry, Earth & Space/Life/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
# FREE APPS
at pbskids.org/apps

- **MULTIPLE LEARNING GOALS**
  - 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
  - Social Emotional Development

- **LITERACY**
  - Dinosaur Train A to Z
  - Molly of Denali
  - Literacy
  - Informational Text

- **ARTS, CREATIVITY AND MORE**
  - PBS KIDS Kart Kingdom
  - PBS KIDS Party
  - PBS KIDS Stickers
  - Plum’s Creaturizer
  - Creativity
  - Healthy Habits
  - iOS Only

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

<table>
<thead>
<tr>
<th>App Name</th>
<th>Age Range</th>
<th>Subject(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cyberchase 3D Builder</td>
<td>6-9</td>
<td>Math</td>
</tr>
<tr>
<td>Cyberchase Shape Quest</td>
<td>6-9</td>
<td>Math – Geometry</td>
</tr>
<tr>
<td>Dinosaur Train Classic in the Jurassic Jr.</td>
<td>3-6</td>
<td>Math</td>
</tr>
<tr>
<td>Fetch! Lunch Rush</td>
<td>4-8</td>
<td>Math</td>
</tr>
<tr>
<td>Jet’s Bot Builder: Robot Games</td>
<td>4-8</td>
<td>Space Science</td>
</tr>
<tr>
<td>Nature Cat’s Great Outdoors</td>
<td>6-8</td>
<td>Earth Science</td>
</tr>
<tr>
<td>Outdoor Family Fun with Plum</td>
<td>6-9</td>
<td>Nature, Life Science</td>
</tr>
<tr>
<td>PBS KIDS Measure Up!</td>
<td>2-5</td>
<td>Math</td>
</tr>
<tr>
<td>PBS KIDS ScratchJr</td>
<td>5-8</td>
<td>Coding</td>
</tr>
<tr>
<td>PBS Parents Play &amp; Learn</td>
<td>2-5</td>
<td>Math, Literacy</td>
</tr>
<tr>
<td>Photo Stuff with Ruff</td>
<td>4-8</td>
<td>Material Science</td>
</tr>
<tr>
<td>Play &amp; Learn Science</td>
<td>2-5</td>
<td>Weather</td>
</tr>
<tr>
<td>Plum’s Photo Hunt</td>
<td>6-9</td>
<td>Life Science, Nature</td>
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<tr>
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- **iOS Only**
### SOCIAL EMOTIONAL DEVELOPMENT

- **Daniel Tiger’s Day & Night** 2-5 Social Emotional Development — Routines
- **Daniel Tiger’s Grr-rific 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

### 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

### 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
- **Wild Kratts Rescue Run** 4-8 Animal Science
- **Wild Kratts World Adventure** 4-8 Animal Science

### PAID APPS at pbskids.org/apps

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Text: **WFSU**

To: **274448**

To sign up!

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