



DIGITAL BACKPACK MATH











AT-HOME LEARNING



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.



Family Math Guide

TIPS AND ACTIVITIES

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:

- Classify, sort and count items
- Describe & compare measurable attributes 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?"

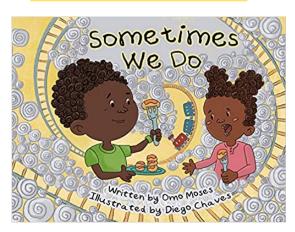




Family Reading List

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.

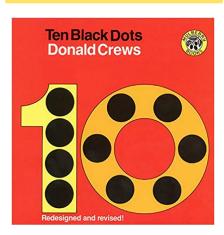
Sometimes We Do



By Omo Moses Illustrated by: Diego Chaves

Ages: 3 to 5

Ten Black Dots



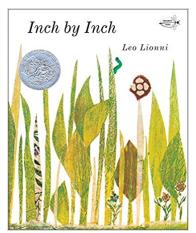
By Donald Crews Ages: 4 to 8

Round is a Tortilla



By Roseanne Greenfield Thong Illustrated by John Parra Ages: 3 to 5

Inch by Inch

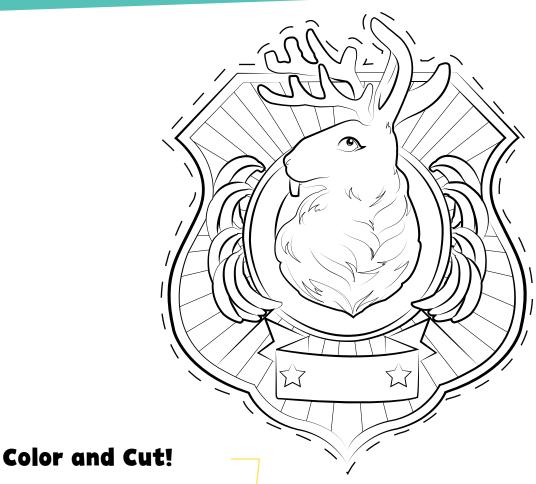


By Leo Lionni Ages: 3 to 7





Make Your Own Badge



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!

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Find Your Badge Number

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:

$$M = 13$$

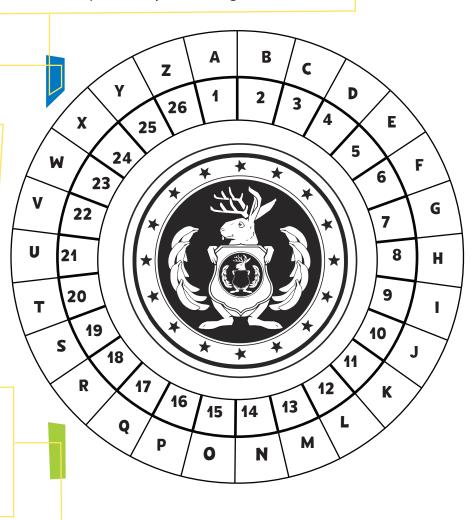
A =

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!

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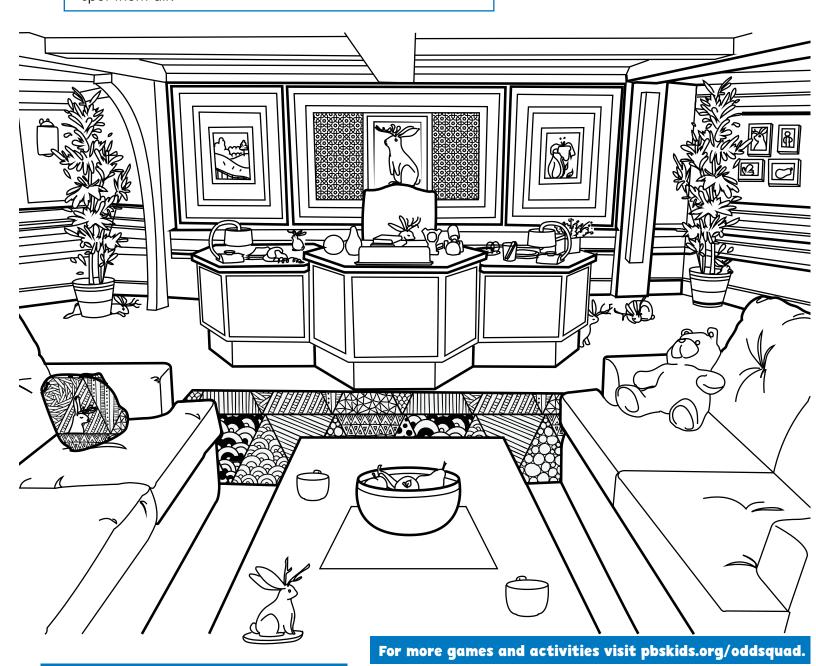




Find the Jackalopes

Find the Hidden Jackalopes.

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



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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.
After watching this priceds what do you went to leave more shout?
After watching this episode, what do you want to learn more about?









SMART SCREEN TIME® TIPS

SORRY!

text messages

and social

media are

typically too

short to call

readina

from
Austin PBS



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!

WOW'S!

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

Enjoy the game

AND discuss

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. 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.

People with screens in their bedrooms sleep on avg 45 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
Caillou	2-5	Social & Emotional Learning	24/7 Channel
Esme & Roy	2-5	Social & Emotional Learning	24/7 Channel
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	24/7 Channel
WordWorld	2-5	Literacy	24/7 Channel
Martha Speaks	4-8	Literacy (Vocabulary Acquisistion)	24/7 Channel
Molly of Denali	4-8	Literacy (Informational Text)	
WordGirl	5-8	Literacy (Vocabulary Acquisistion)	24/7 Channel

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)

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 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





APP 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 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





Bright by Text

Text: WFSU

To: 274448

To sign up!

Standard message and data rates apply.
Text STOP to 274448 to stop.
Text HELP to 274448 for help.

Sign up for Bright by **Text to receive text** messages directly to your phone with resources targeted to your child's age (birth-8) and researchbased content and updates from WFSU, PBS KIDS, and other partners.



