About your presenter

My name is Amy Kellem and I am the STEM Classroom Teacher here at BPS. I also serve as the Math Intervention Teacher and support teachers in math instruction, assessment, and intervention needs.

I have been training in math intervention practices since 2009, teaching since 2004, and working at BPS since 2015.

My husband is the Spanish teacher at Bardstown High School. I have three children - ages 22, 16, and (almost) 8.

Bedtime Math

Bardstown Primary School - Parent University 2019

Bedtime Routines

Most of us have a bedtime routine for our kids. Think about some of the things in your bedtime routine.

- Bathing
- Brushing teeth
- Reading a book
- Snuggling
- Getting water, an extra hug, turning on the nightlight, one more hug, etc.

Reading at Bedtime

Here is some information about the importance of reading to children:

Reading to young children stimulates their development and gives them a head start when they reach school. Apart from helping their reading, sharing a bedtime story with a child promotes their their memory. It also improves their emotional and social development.

Most important is that reading aloud is a period of shared attention and emotion between parent and child. This reinforces reading as a pleasurable activity.

Children ultimately learn to love books because they are sharing it with someone they love.

NOW - replace the highlights with math phrasing.

Math at Bedtime

Talking about math with young children stimulates their development and gives them a head start when they reach school. Apart from helping their math skills, sharing bedtime math with a child promotes their their memory. It also improves their emotional and social development.

Most important is that bedtime math is a period of shared attention and emotion between parent and child. This reinforces math as a pleasurable activity.

Children ultimately learn to love math because they are sharing it with someone they love.

When you replace the highlights with math phrasing, could that also be true?

Bedtime Math?

You might be thinking - I don't have a math book at home to read to my child.

So, how would bedtime math work?

Math at bedtime is another way for you to connect with your child on an interpersonal level, but it is also a way to make math something that is part of a normal routine. Something to be enjoyed. Something we do together.

No Book Required

One of the best things to come around in a long time in the world of math instruction is a practice called "Number Talks."

Number talks focus less on "rules" and "procedures" and "memorization" and focus more on understanding the relationships that allow those rules and procedures to work the way they do.

In a number talk, the teacher takes the role of a facilitator of learning, as opposed to being the sole provider of all of the telling and explaining.

In a bedtime math routine, YOU would facilitate the discussion.

Bedtime Math

Guess My Number

You need to have an idea of a range of numbers your child understands. This will vary from child to child based on age and level of understanding. For example - within 30, within 100, within 1000.

Let's try out this scenario. I will tell you my range to get us started.

My number is between 0 and 100.

Think about the following math words and phrases as you make your guesses: greater than, less than, odd, even, decades, between, after, before.

Counting Routines

Once again, you will need to know an appropriate range for your child (similar to the previous range). There are a few variations of this game.

- Start at and keep counting until I say stop.
- Let's count together. I will start, then you say the next number 7 (8) 9 (10), etc.
- Start at _____ and count back until I say stop.
- I will say three numbers then you say the next three numbers 15, 16, 17 (?)
- Let's count by ____.
- What if we started at ____ and counted up ten each time? (3, 13, 23, 33, etc.)

Writing Numbers

You can play this game in a variety of ways. Take turns. Guess my number!

- Watch me write this number in the air.
- I am going to write a number on your back.
- Close your eyes and I will write a number on your palm.

If they can handle it

I am going to write a number on the bottom of your foot!

Making Numbers

In this game we will think about the parts that go together to make a number.

- Tell me two numbers that go together to make _____.
 - Can you think of another way?
- Tell me a doubles fact you know. (If they do not know what doubles means that is a whole new opportunity for a number talk.)
- How many ways do you know to make 5? 10? 20?
- If I have _____, how many more do I need to have _____.
- Imagine I rolled a _____ (number from 2-12) using two dice.
 - What numbers did I roll?

Finger Numbers

In this game you will use fingers to make numbers.

- Show me ____. Show me another way to make ____.
 - Using two hands, this works for 2-8.
- Make a number and hide it. Guess my number. Use math language.
- Make a number on your fingers. Have your child make the same number. -
 - Now create a mirror image with your fingers.
 - I have ____ and you have ____.
 - How many do we have in all?
- Make a number. Ask your child to think of a math fact to match your fingers.

Geometry

- If I drew two triangles, how many sides would I have to draw?
- If I wanted to use straws to make 3 squares, how many straws would I need?
- Can you think of a letter that has a triangle as a part of it?
- Can you think of a shape that has more than 4 sides? What is its name?
- How many _____ can you see from your bed. (insert shape name)

Other Ideas

- Ask a question about an upcoming event. Today is _____.
 How many more days until ____.
- If you counted all of the fingers/toes/eyes/arms/leg/feet, etc. of all of the people in our house, how many would that be?
- How many doors are in our house?
- Look for numbers in the books you read.
- How many letters are in your name? How many letters are in our last name?
- Count the pages in a book you read.
- Check out a book with math from the public library.

Don't stop at a correct answer

Here are some great ways to extend a "right" answer

- How do you know?
- What kind of thinking did you use to think that answer?
- Tell me about your thinking.

Try to ask less questions that allow for a single answer or yes or no.

Open questions allow for more than one right answer are great ways to help a struggling child to feel successful. Use less "can" questions and use more "tell."

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