Young children are natural mathematicians!

The books and activities in this Storytime S.T.E.A.M. Backpack focus on exploring and playing with different mathematical ideas. S.T.E.A.M. stands for Science, Technology, Engineering, the Arts and Mathematics.

Mathematicians:

• Are brave and bold.
• Take risks and discover.
• Make mistakes, repeat, tinker, and change their thinking.
• Ask questions, share ideas, and consider other perspectives.

While you’re reading these stories and playing with the materials, consider the following ideas and techniques to grow confidence and a love for math!

Read together: One of the best ways to deepen your reading time together is to pause and ask questions.

• What do you think will happen in this story, and why do you think so?
• What will happen next? How do you know?
• What connections can you make between this story and another story?
• What do you see, notice, or wonder about?
• What (numbers, patterns, shapes or other math concepts) do you see?

Play Together:

• Match up animal patterns to create 4 cute critters or mix up the pieces for fun!
• Teach mathematical concepts such as counting, addition, and subtraction.

Books:
Beastly Babies by Ellen Jackson
Ten Animals in Antarctica by Moira Court

Activity:
Easy-Twist Animal Builders
**Outside My Window**

Take a walk around your neighborhood or watch your window to see what type of animals you may see.

Count how many birds you encounter.

**Animal Shapes**

Materials:
- Construction Paper
- Scissors
- Glue
- Crayons/Markers

**Instructions:**
- Cut out different shapes from pieces of construction paper.
- Name the shapes with your child as you are cutting them.
- Lay out all of the shapes and start to assemble different animals.
- Glue down your shapes to another piece of paper and decorate to bring your animal to life.
- Count how many of each shape were used or count how many of each shape makes up your animal.

**Butterfly Process Art**

Materials:
- Markers
- Water in a spray bottle or shallow tray
- Paper towel
- Paper clip, clothespin, or string

**Instructions:**
- Color every inch of the paper towel with markers.
  - Use at least two different colors.
- Wet the entire paper towel by spraying with water or dipping the towel into a shallow tray of water.
- Scrunch the paper towel into a ball, unfold, and lay flat to dry.
- Create a butterfly by scrunching the middle of the towel together and securing with a paperclip, clothespin, or string.

**See You Later, Alligator**

See you later, alligator!
In a while, crocodile!
Gotta go, buffalo!
Give a hug, ladybug!
Take care, polar bear!
Bye-bye, butterfly!
Give a kiss, goldfish!
Out the door, dinosaur!
Hit the road, happy toad!

**Let's Go to the Zoo**

From **Super Simple Songs - Animals**

Let's go to the zoo.
And stomp like the elephants do.
Let's go to the zoo.
And stomp like the elephants do.

Other verses:
- Jump like the kangaroos
- Swing like the monkeys
- Waddle like the penguins
- Slither like the snakes
- Swim like the polar bears
- Dance like the animals

**More Books!**

- *A Troop of Kangaroos* by Lisa Mundorff
- *If You Go Down to the Woods Today* by Rachel Piercey
- *Where’s the Pair?* by Britta Teckentrup
- *8, An Animal Alphabet* by Elisha Cooper
- *The Animals Would Not Sleep!* by Sara Levine
- *She Leads* by June Smalls
- *What Do You Do With a Tail Like This?* by Steve Jenkins