

Family Fun with Math: Palatable Patterns

Math learning can happen anytime! Here are a few ideas to help your children see the math all around them.

Why Patterns?

Creating and recognizing patterns is a great way for children to learn many foundational skills including early math and science skills. When children construct and analyze patterns they are using their observation skills to recognize unique characteristics of items such as color, shape and size to categorize and organize items in a specific way. Children will learn how properties and characteristics of items are important and represent information about the item as well as how order and spatial location matter in certain circumstances.

Try it Out: [An action families can take together]

- Offer a variety of colors, shapes or sizes in food during snack or meal time. For younger children choosing foods with more distinct differences is recommended while older children may benefit from an added challenge of more subtle differences.
- Discuss the different colors, shapes and sizes of the food that you have and create a pattern yourself as a model for your child. Start simple with a simple alternating pattern with two colors or shapes.
- Ask your child what they notice about your pattern and see if they can create their own with your help or even practice sorting items into piles of matching characteristics like color or shape if they are not quite ready for pattern making yet!

Talk about It:

- Here are some questions to ask your child:
 - What do you notice about our food today? Are there different colors? Shapes?
 - What do you notice about how I arranged my snack? Do you see a pattern?
 - Can you make a pattern with your food? Tell me about your pattern. How did you decide which food would go where in your pattern?
 - What makes this a pattern?
- Take pattern making to other areas of interest for your child including outdoor time, play time, and other daily activities including laundry! Talk about how you could make observations, categorize, sort and/or create patterns with items found outside, in the toy box or in the clean laundry pile.
- A fun game that can be played with this activity is to create a pattern behind a piece of paper so that your child cannot see it. When it is ready show them the pattern and talk about how the items are arranged then cover it back up and see if they can recreate the pattern from memory!

Make it Work for Your Child:

- This activity can be adapted and simplified by adapting it to a sorting game where similar properties such as color, shape, and size are sorted into individual piles.

- To simplify it further match bowls to colors that are being sorted or add a photo of which color or shape should go in each bowl as items are being sorted.
- If you would like to continue making patterns you could create a pattern and encourage your child to recreate the same pattern that you made on their own looking at yours as a model.

Make it Work for Your Family:

- Take turns making patterns and sharing them around the dinner table to engage the whole family in this activity.
- Take photos of the patterns that you make to share with siblings or parent/caregivers who are not present at the time of the activity and save them to recreate later.
- Engage siblings by having them create their own patterns to share and discuss with their younger siblings. Older siblings are excellent models!