

## Math Distance Learning Ideas for K2 Families

We know that for children to grow as readers, they need to read every day. To help them grow as mathematicians, they need to talk about numbers and shapes as they arise in your daily lives. Math isn't just about counting and computation. Pattern finding, reasoning and an awareness of how math is important in our everyday lives can be engaging without being intimidating. Here are some activities that will allow you and your child to use and discuss essential math concepts in a natural, fun way while you are at home.

**Sorting and Counting** Have your child sort and count cutlery, kitchen utensils, toys, laundry, and more. Some questions you can ask include, *"Where should this item go?"*, *"How did you know which group to put the items in?"*, *"How many...?"* and *"Which group has more items?"* Create [inventory bags](#) of things around the home (e.g. pasta, paper clips, coins) to encourage estimation and counting.

**Environmental Shape or Pattern Hunt** Go on a scavenger hunt around the house (or even through different picture books) and keep track of the different shapes or patterns you find.

**Physical Activities** While doing physical activities (e.g. walking from one end of a room to another, hopping, jumping jacks, going up and down stairs), keep track by counting both forwards and backwards. If you have access to an outdoor space, have your child create a hopscotch path. If you're indoors, create a number path by writing on cardboard boxes or sheets of paper.

**Building, Puzzles, and Mazes** Building with blocks, Lego, or any other loose parts (e.g. coins, shells, pebbles) all help develop [spatial reasoning](#) and can be an opportunity to explore ideas like symmetry. [Mazes](#), jigsaw puzzles and [tangrams](#) are also great for helping children flex their spatial muscles and encourage perseverance.

**Measuring Around the House** Have your child use different sized cups to play with water or use paperclips (or other standard-sized things like coins) to measure the length of things around the house. Have your child trace their foot and find things that are about the same length, longer, or shorter than their foot. *More information about [measuring with young children here](#).*

**Cooking and Food** Have your child [help out in the kitchen](#) by counting or measuring out ingredients. You can also have your child count out cups, plates, crackers, cookies, marshmallows, slices of pizza, juice boxes, sandwiches and more.

Having a **deck of cards** will lend itself to many, many invented math games. Remove the face cards and an ace can be used to represent 1. The following card games help build/reinforce number sense and increase in difficulty.

**Compare** Pass out all cards in the deck among all of the players. Each player flips over one card at the same time. The player with the higher number keeps both cards. If the two cards are the same, turn over another card. The player with the higher number keeps all four.

**Double Compare** Same as above, but turn over two cards each time and count the total on both cards. The person with the larger total takes the cards.

**Close to Ten** Remove the face cards from a deck of cards. Deal 3 cards to each player.

Which two cards bring you closest to 10? Which player is closest to 10? *e.g. You turn over the cards 5, 4, 3 and your opponent turns over an Ace, 8, and 3. You can make 9 (5 and 4) and your opponent can make 9 (Ace and 8) or 11 (8 and 3). It is a tie since you are both 1 away from 10!*

You could also have your child create their own number cards. Let them use blank index cards and stickers or drawings to create a set of number cards that have unusual arrangements of numbers. This will help your child develop their subitizing skills (recognizing small values without counting). Visit [this site for more card games ideas](#).



If you have access to **some dice** from any board game, here are some dice game ideas:

- Roll two dice and pick up the same number of loose parts (e.g. stones, coins, shells, Lego) as what you rolled.
- Roll two dice 8 times. Write down the total of each roll. Which total comes up the most?
- Roll one die. How many more do you need to get to 10.
- Roll two dice. How many more do you need to get to 20?
- How many rolls will it take to get past 50 or even 100?

**Here are some other games and activities** that encourage mathematical thinking. If you don't have easy access to any of these games, many of them have boards or playing surfaces that you can draw out on sheets of paper (e.g. a Checkers or Connect Four grid can be drawn and 1p or 5p coins can be used as the different-colored game pieces). The links below are to rules and/or printable game boards/pieces if you have access to a printer.

- [Checkers \(rules\)](#)
- [Snakes and Ladders](#)
- [Racing Bears](#)
- [Dots and Boxes](#)
- [Nim](#)
- [Attribute Trains](#)
- [Mancala \(rules\)](#)
- [Tic-Tac-Toe](#)
- [Connect Four](#)
- [Crazy Eights](#)
- [Go Fish](#)
- [Bingo](#)
- [Origami](#)
- [Dominoes](#)
- [Concentration](#)
- [Sudoku](#)

Don't forget any commercial games you might have at home (e.g. *Guess Who?*, *Uno*).