3 Easy & Effective Math Games

by Karen Davis 2023

Not many children grow up playing board games anymore. That means not using dice. Counting the dots on a single die or adding the amounts on 2 dice together is not really a skill required for sports or video games. This skill is so important for developing Math concepts it even has a name. Subitizing. (sue-bit-izing) Using a few dollar store items with your student can help them quickly learn to subitize. Try these games to introduce Math skills or strengthen the foundation of numbers and have fun doing it!

Dice

You can use regular dice from a game you already have on hand, or purchase separately. You can even find large, soft dice and blank dice where you make the dots with wipe-off markers. You can even store the dice in small lidded containers that are transparent. This keeps the dice contained, the sound-level of clattering dice muted, and provides practice with larger motor skills if necessary.

High Top

Use the dice to roll a number. If your student is new to numbers, just have them count the dots on a die and say it aloud. If they have advanced skills, they can name the number on each die, add the numbers, and announce the sum. (Use 'sum' instead of 'total' to get that Math vocab working!) Although this can be played orally, having your student write out the numbers or the addition equation provides even more reinforcement. If two or more students are playing, player with the highest sum wins. This game can also be played independently as student records how many rolls to reach a total of 20, 50, or even 100 as their ability level increases. You can set the challenge depending on student ability. Speaking of ability levels, the dice can be used for subtraction and multiplication too!

Dominoes

These can also be found in dollar stores. Newer models are much more colorful than the original black dominoes with white dots, but they all work like a champ for subitizing skills! Find a set and put them to work, er, play, for you!

Equal Dots

Have players draw 7 dominoes, or let your student play independently. The object is to lay out a domino, dots up, and then 'connect' a matching value domino. Any direction works, as long as the 2 matching values are touching. Saying these values out loud will reinforce the subitizing skills. Watch how your student gets faster and faster at recognizing the value of the dots. That's Math! If this is a 2 or more-player game, keep filling the pile of 7 after each draw until all dominoes are used. The player who uses all of their dominoes first wins. This can also be played by using a double-value domino as a chance to get another turn. You can find lots of ways to make the game more challenging as your student's skills develop.

Playing Cards

A deck of cards goes a long way in improving Math skills! So many activities! You can probably use any of the games you played as a child to work on subitizing with a deck of cards. If your student is on a beginning level, be sure to remove the face cards from the deck before playing. You can discuss how Ace is equal to 1 if you want to use it that way, or take it out altogether. Also feel free to combine a few decks to give lots of practice with the various numerical equations.

Love (You may remember this one as 'War', but I'd rather play 'Love')

Divide the cards face down between 2 players. Players simultaneously overturn one card and the highest value wins both cards to their side. If both cards match, players lie down 3 cards, face down, simultaneously and place a fourth card down face-up (I-De-Clare-Love!). The winner of this 4th card collects all the cards. Ultimate winner for this game is the person who collects all the cards. Watch your student go from counting all the shapes on the card to use words like less-than, more-than, and equal, to just 'knowing' which card is greater as soon as it's flipped over. That's subitizing!

Subitizing lays the foundation for students to be able to mentally 'see' numbers without having to count by ones. This ability to identify patterns is an important part of foundational Math and makes working with numbers in more complex cases a quicker and easier process. Once they begin to see the objects that represent a total number, their subitizing advances to a level where they can see the numbers within numbers (i.e., 2 fours in 8; 3 twos in 6). All of this develops quicker calculations amongst all the operations and more cognitive space for problem-solving. And it can all start with these easy play-time manipulatives.