

Online Math Resources



Online math resources for students:

- <https://mathbeforebed.com/>
- <https://www.gregtangmath.com/>
- <http://wodb.ca/> (tons of "Which one doesn't belong?" images)
- <http://www.estimated180.com/>
- <https://www.khanacademy.org/math/>
- <http://www.sheppardsoftware.com/math.htm#earlymath>
- <https://www.splashmath.com/>
- <https://pbskids.org/games/math/>
- <https://www.mathplayground.com/>
- <https://www.abcya.com/grades/k#letters>
- <https://illuminations.nctm.org/Default.aspx> (This is the National Council of Mathematics site. This link will take you to a page FULL of math games, which can be searched by grade level. Everything on this site is excellent!!)



Dice Game Ideas



Dice games can help to encourage counting, number sense and mental addition and subtraction. They also introduce strategic thinking and are a good way to practice social skills such as taking turns.

- Roll and count the dots - then find the matching number card
- Roll and count common household items (cereal, legos) to form a set
- Roll the die. Ask your child for a number that is larger or smaller than the number rolled. Then have them create both numbers with objects
- Roll the die and subitize the number. Subitizing is when your child is able to recognize the amount without counting the dots.
- Roll two dice and add the numbers together.
- Roll two dice and subtract the smaller number from the larger number.
- Play Dice War: Each player rolls one die. Whoever has the higher roll, wins a chip/counter or other small household item. First player to win 10 chips wins the game.
- Play the "Build a Tower" dice game. Use Lego, pennies, wooden blocks, popsicle sticks or any basic building material you can find. Have players roll a pair of dice and add the two numbers. The player gets that number in building materials if the dice are added correctly and uses them to build a tower. Go through 10 or 15 rounds. The player with the tallest or most creative tower at the end wins.



Number Card Game Ideas



Using a standard deck of cards, remove the face cards: jack, queen, and kings. Now you have a set of number cards, with the Ace being the number ONE.

If you do not have a deck of cards, there are number cards provided in the packet.

Number card games help students build their automaticity of recognizing numbers and their understanding of number values. Below are some number card games that are fun for everyone!

- Shuffle the number cards. Ask your child to put them in order
- Put the number cards on a staircase in sequence. Have your child walk or jump to the step and say the number on the card
- Match the number of cards to a set of objects
- Hide the number cards. Have your child go on a "number hunt" using positional vocabulary to guide them (above, behind, next to, beside, under). Have your child collect and then sequence the cards.
- Match the number cards to items in the house. Find the numbers in their environment
- Practice writing the numbers in sequence using the number cards as a resource
- With a deck of cards, do a card sort. They can sort by number, by color, or by suit.
- Play "War". Each player flips a card. The person with the higher card wins both cards. Continue the game until one player runs out of cards.
 - Variation: Each player flips 2 cards and adds them together. The person with the larger sum wins all 4 cards.



Shape Activities



Learning about shapes and spatial relationships build skills to help children with reading, writing and math. Spatial relationships explore the concept of where objects are in relation to something else. Exploring shapes and objects help children understand how they can be changed, put together or pulled apart. Vocabulary is important when describing shapes.

2 - Dimensional or flat shapes - circle, triangle, square, rectangle, hexagon - described by their angles/corners/vertices and their sides

3 - Dimensional or solid shapes - cone, sphere, cube, cylinder, etc. - described by their faces, edges and vertices

- Go on a shape hunt and look for objects inside or outside of your home. Look for 2-D and 3-D shapes and describe their size and positions
- Fold paper to make a hat, boat, paper airplane, etc. and talk about the shapes you make as you fold
- Make your own jigsaw puzzle from a newspaper or magazine page. Cut it out and have your child put the pieces together. Talk about how the edges of the piece fit together
- Using dot paper or blank paper, draw 2-D shapes and use vocabulary while you are drawing. (I'm going to make 3 straight lines that connect at corners to make a triangle)
- Use toothpicks, spaghetti, marshmallows or other household items to build 2-D and 3-D shapes.
- Use cutouts of different 2-D shapes to have your child create silly pictures such as monsters with the shapes
- Collect scrap paper, magazines, etc to have your child cut into different shapes and use the pieces to make a picture
- Play "I SPY" and describe things by their size, shape and position

Goals of Kindergarten Math Virginia Curriculum:

- Counting to 100 from any given number; telling the number after up to 100; telling the number before up to 10; and counting by 10's to 100
- Count objects to answer the question "how many" up to 20; read, write, and build sets up to 20
- Compare numbers and sets of objects up to 10 using more, fewer, or the same; order those sets from least-greatest and from greatest-least
- Count backwards from 10, starting on any number
- Recognize and be fluent with part-whole relationships up to 5 ($5+0$, $4+1$, etc); investigate part-whole relationships to 10.
- Represent addition and subtraction stories using objects, fingers, drawings, etc and solve word problems using addition and subtraction within 10
- Sort and classify by putting similar objects together by a single attribute
- Describe the length (longer, shorter), height (shorter, taller); weight (heavier, lighter); volume (holds more or less); time (longer or shorter) of objects or pics
- Describe objects in their environment using shape names and the position of those shapes (above, below, beside, in front, behind, next to)
- Identify four basic shapes: circle, square, rectangle, triangle; compare sizes of shapes,
- Identify the four coins: penny, nickel, dime, and quarter, and know their value
- Read and interpret a calendar
- Collect, organize, and represent data
- Read and interpret data in object graphs, picture graphs, and tables
- Identify, describe, extend, create, and transfer a pattern
- Demonstrate understanding of the fraction one-half by showing how to share equally with two sharers