Welcome to

Kindergarten Math Fun!

Tonight's Goals

You will

- ★ see an overview of math skills taught in K
- ★ understand the math expectations for students by the end of the year
- ★ get tips for helping out with math at home

Topics at a Glance

- Counting within 100
- Instantly recognize small quantities
- Represent, model, and solve addition and subtraction problems within 10
- Compose and decompose teen numbers
- Sort and classify objects
- Compare quantities to 20
- One-to-one correspondence and cardinality
- Fluently add and subtract within 5
- Compare and order objects according to measurable attributes
- Identify, compose, and compare basic shapes

Grade Level Expectations

Standard 1. Number Sense, Properties, and Operations

1. Whole numbers can be used to name, count, represent, and order quantity

2. Composing and decomposing quantity forms the foundation for addition and subtraction

Standard 4. Shape, Dimension, & Geometric Relationships

1. Shapes are described by their characteristics and position and created by composing and decomposing

2. Measurement is used to compare and order objects

Number Sense

Standard
1

1. Whole numbers can be used to name, count, represent, and order quantity

Students can:

a. **Use number names and the count sequence** (CCSS: K.CC)

b. **Count to determine the number of objects** (CCSS: K.CC)

c. **Compare and instantly recognize numbers** (CCSS: K.CC)

2. Composing & decomposing quantity forms the foundation for addition & subtraction

Students can:

a. **Model and describe addition as putting together and adding to, and subtraction as**

taking apart and taking from, using objects or drawings (CCSS: K.OA)

b. **Fluently add and subtract within 5** (CCSS: K.OA.5)

c. **Compose and decompose numbers 11-19 to gain foundations for place value using objects and drawings** (CCSS: K.NBT)

Recap of Number Sense in Kindergarten

5

- fluently add **and** subtract 0-5
- identify amount in groups without counting

0-10

- use finger patterns correctly
- use 1:1 correspondence
- correctly write numerals to 10
- compare and describe 2 numbers using words more (greater), less (fewer) and same as
- solve addition and subtraction number stories
- make 10 from any number 0-9
- decompose numbers into pairs in more than one way

0-20

- count forwards and backwards
- use 1:1 correspondence
- correctly write numerals to 20
- correctly count and form a group of objects
- compose and decompose numbers 11-19 using objects

0-100

- count forward from a given number
- count by ones and tens to 100
- identify tens and ones in a given number

GEOMETRY

STANDARD
4

Shapes can be described by characteristics & position & created by composing & decomposing

Students can:

a. **Identify and describe shapes** (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres) (CCSS: K.G)

b. **Analyze, compare, create, and compose shapes** (CCSS: K.G)

Measurement is used to compare and order objects

Students can:

a. **Describe and compare measurable attributes** (CCSS: K.MD)

b. **Classify objects and count the number of objects in each category** (CCSS: K.MD)

Recap of Geometry in Kindergarten

Shapes

- describe and identify shapes regardless of orientation
  - both 2D and 3D shapes
- describe position
- analyze and compare shapes using attributes
- compose and decompose shapes to create new ones

Measurement

- describe measurable attributes of objects
- describe the difference between two comparable objects and tell the difference using more, less, and the same as
- order objects by length, height, weight, or price
- Classify, count and sort categories

What Can You Do at Home?

PLAY GAMES!!!!!

- board games
- blocks

  Blokus
- card games

  10 Kid Friendly card games

  Simple Math Card Games for Kids

Making Finger Patterns

Range of 1 to 5

What to do and say:

Show three on your fingers.

Similarly 2, 5, 4, 1.

Now show me on your other hand: 3, 2, 5, 4, 1.

Range of 6 to 10

What to do and say:

Show me 6 fingers.

Similarly, 9, 7, 10, 8.

Extensions

- Have your child show you the finger patterns on their head as “bunny ears” (without looking).
- Have your child tell you how many more are needed to make 5 and 10

Matchy Matchy!

Supplies - a standard deck of playing cards (perhaps remove face cards when learning)

2 to 4 players sit in a circle facing each other. One player is the dealer. The dealer shuffles the cards and deals them face down to each player until all cards have been dealt. It does not matter if players do not all receive the same number of cards. Each player places their cards in a neat face down stack without looking at them.

Playing the Game

The player to the left of the dealer goes first. The player takes the top card from their stack and places it in the middle. The player to their left goes next and the game continues. When two cards match be the first player to yell out "Snap!" and touch the pile. The first player to yell out takes the pile of face up cards and makes a new stack in front of them.

If any players get excited and shout out at the wrong time they must give each player one of the cards from their face down stack.

If a player runs out of cards in their face down stack they simply flip over their face up stack and continue. When any player runs out of cards, the game is over. The player with the most cards is the winner.

Greater Than War

Play with 2 players

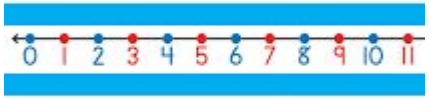
Remove the face cards from a regular deck of cards.

Explain that Aces = 1. Give each player 1/2 of the deck. Both players turn over the top card. The one with the higher number should say, for example, "6 is bigger than 2" (or "6 is greater than 2"), then takes both cards.

Repeat until the decks are used up, then you can turn the cards over and play again. The one with the most cards wins--or you can just keep turning your cards over and play indefinitely. A great addition to the game - how many more (or fewer) is it?

"War" is one of the more popular math games because it is so easy to play, and also because it can be modified in so many ways. This version works on comparing numbers, but you can also add the numbers together, subtract them, and in a few years even multiply them. Keep coming back to this game; it's a jewel!

Secret Number



You, the caller, will think of a number from 1-20. Say, "My number is greater than ---". Have the child guess the number. "It's less than ---". Guess again. Keep going until the child guesses the number.

NOTE: Children at this age will have a hard time keeping the sequences straight in their head. It is helpful to play this with a number line in front of you, so you can mark off the numbers that are guessed and point to the greater-than or less-than points.

If the child wants to be the caller, be aware that this is a more challenging role than guesser. Bring in another player to be the guesser, and you can help coach the caller.