Virtual Family Math Night

brought to you by JUMP Math

Mathematical thinking

- For everyday living, work & further study
- Not the same as “doing” math
- Requires reasoning, modelling & making connections to big ideas
- Is a process that needs lots of practice

Agenda

Family Math Night 2021

1st Guess My Number

2nd Card Games

3rd Coin Play

4th Fraction Play

5th Wrap Up

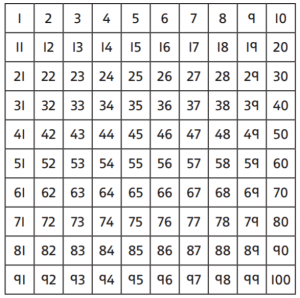
Warm Up - Guess My Number

Ask "Yes" or "No" questions:

- Is your number odd?
- Is your number greater than 30?
- Is your number divisible by 2?
- Do you say your number when you skip count by 3s?
- Is the ones digit of your number greater than the tens digit?

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Guess My Number
Materials: Hundreds Chart
Grade: Any



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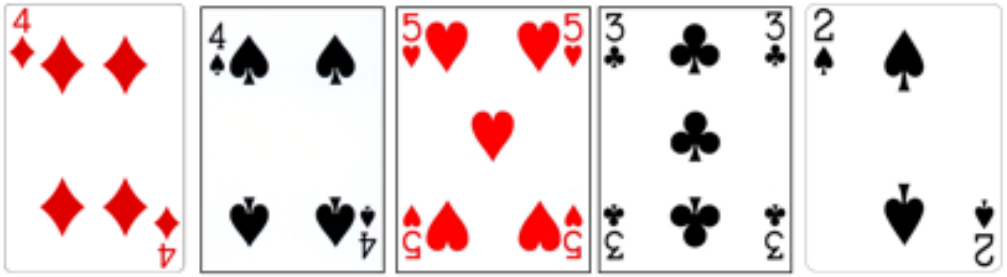
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

- Tell your child that you are thinking of a number between 21 and 45 (or any other grouping of numbers, but for new players, start with a smaller range of numbers).
- The game proceeds when your child asks you questions about your number as a means of eliminating possibilities. Only “yes”, or “no” may be answered to the questions, and each question needs to be different from the previous question.
- For example, your child may ask, “Is your number odd?”(no). This immediately eliminates all odd numbers between 21 and 45. They could then ask, “Is your number divisible by 2?”(yes – which confirms that the number is even). Next they could ask, “Do you say your number when you skip count by 3s?” (no). This means that the remaining options are 32, 34, 38, and 44. So the next questions could be, “Is your number equal to 34?” (no), and “Is the ones digit greater than the tens digit?” (no).
- The more you play, the more your child can use terms and knowledge that they have learned in math class, to ask questions.

Card Games - Addition Solitaire

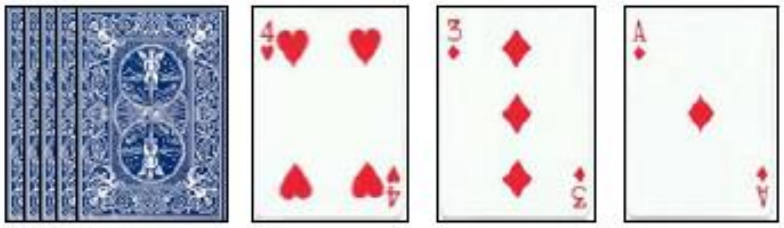
1. Remove all Jacks, Queens, and Kings.
2. Ace is worth one  = 1
3. Shuffle and turn over the top 5 cards.
4. Roll two dice and find cards that add to the amount shown on the dice.

Try to use as many cards as you can at one time.



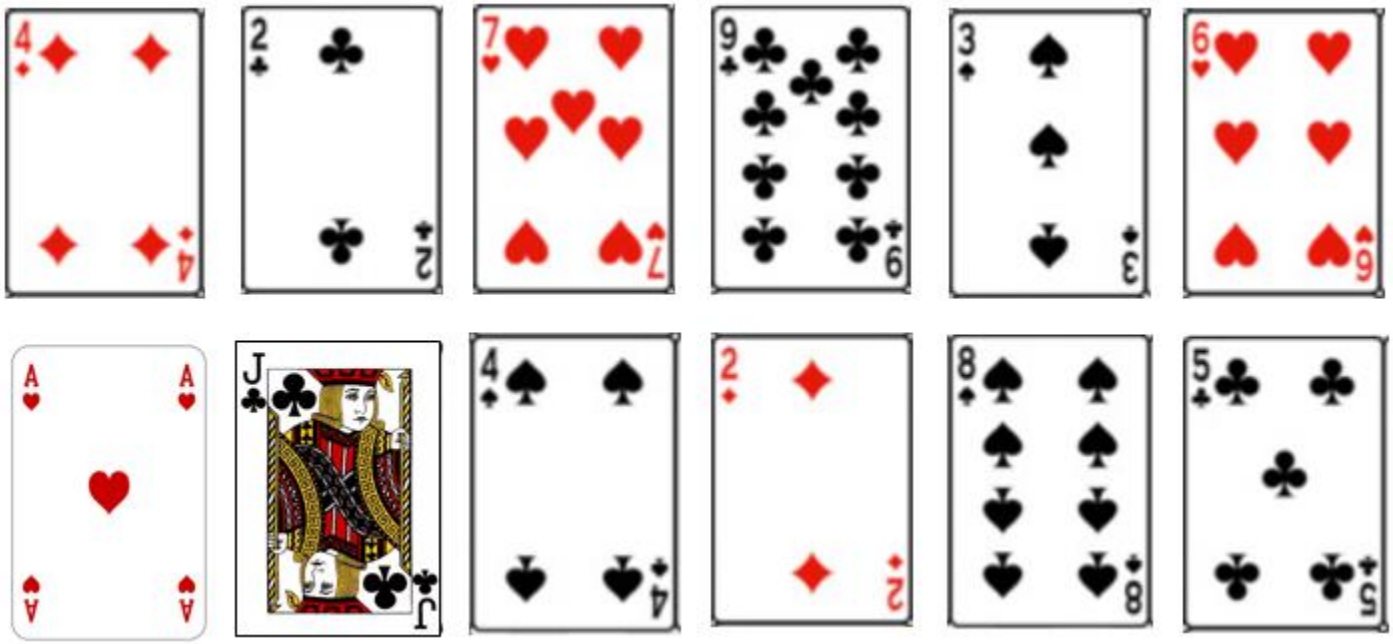
Card Games - Place Value Battle

1. Use playing cards with 10s and face cards removed
2. Ace is worth one  = 1
3. Players flip 3 cards over at the same time.
4. Arrange the cards to make the largest 3-digit number with the cards.



5. Player with the bigger number wins all of the cards.

“I Spy” Multiplication



=13

=12

=11

=1

I Spy Multiplication (or Addition)
Materials: Playing cards
Grade: 2 and up

- Play in pairs of two or more players.
- Use all cards except the Joker cards. Jack = 11, Queen = 12, King = 13
- Deal all of the cards face up, in an array of 13 x 4.
- Players take turns removing all pairs of 10, set those cards aside and play with the rest of the cards.
- Player 1 says, “I spy two cards that make a product (or sum if playing with addition) of 32.”
- Player 2 searches for, and removes from play, all pairs of cards that multiply together to make a product of 32.
- Player 1 checks that all pairs have been found.
- Switch roles for the next round of play.
- The winner of the game is the player who collects the most number of pairs of cards.

Coins – Trading

You need 10 pennies, 4 nickels and 1 dime

- Player 1 tries for 10 coins, Player 2 tries for 20 coins
- Player 1 tries for 18 coins, Player 2 tries for 12 coins

10¢ 5¢ 1¢

Coin Activities
Materials: real or play coins
Grade: Any

Activity 1

- Remove loonies and toonies, and set aside. This activity does not require them.
- Distribute coins to pairs of children.
- Player 1 takes a handful of coins, while Player 2 places them in order from greatest to least value. Player 1 checks the work.
- Repeat and switch roles each time with different groups of coins.

Activity 2

- Distribute nickels and dimes.
- Each player takes turns creating as many different combinations of dimes and nickels to create a target value, such as 25 or 40 cents.

Coin Activities

Activity 4 Trading Coins

- Distribute the same number of pennies and nickels as listed below.
- Have each pair trade coins worth the same amount (e.g. 5 pennies for 1 nickel) so that each player's amount of money does not change as the number of coins changes.
- Encourage each player to count their money after each trade to verify that their amounts have not changed.
- Players each have a separate goal for number of coins, but they will have to work together to achieve their goals.
- Give each player 10 pennies, 4 nickels, and 1 dime. Player 1's goal is to collect 20 coins, while Player 2's goal is 36 coins.
    a. Player 1's goal is to collect 10 coins, while Player 2's goal is 20 coins.
    b. Player 1's goal is to collect 18 coins, while Player 2's goal is 12 coins.
    c. Make up your own number and variety of coins (add in quarters, loonies, and toonies), and player goals.

Fraction Play

What word do you get when you combine…

a) the first $\frac{2}{3}$ of sun and the first $\frac{1}{2}$ of person?

b) the first $\frac{1}{2}$ of grease and the first $\frac{1}{2}$ of ends?

c) the first $\frac{1}{3}$ of trance and the last $\frac{3}{4}$ of luck?

d) the first $\frac{1}{2}$ of wood and the last $\frac{2}{3}$ of arm?

Fraction Play: Solutions

a) sun and person= **super**

b) grease and ends = **green**

c) trance and luck = **truck**

d) wood and arm = **worm**

Try making up your own.

Fraction Play
Materials: Questions as displayed, and others made up by you
Grade: Grade 3 and up

- Using two or more words, have your child extract fractions of letters that will be combined with other extracted letters, to make a new word.
- For example, I can take the first two-thirds of the word “sun” (s, u), and combine them with the first half of “person” (p, e, r) to make the word “super”.
- As a challenge, use more words, and various fractions.

Computational Fluency Game

Addition Challenge for 2 – 4 players

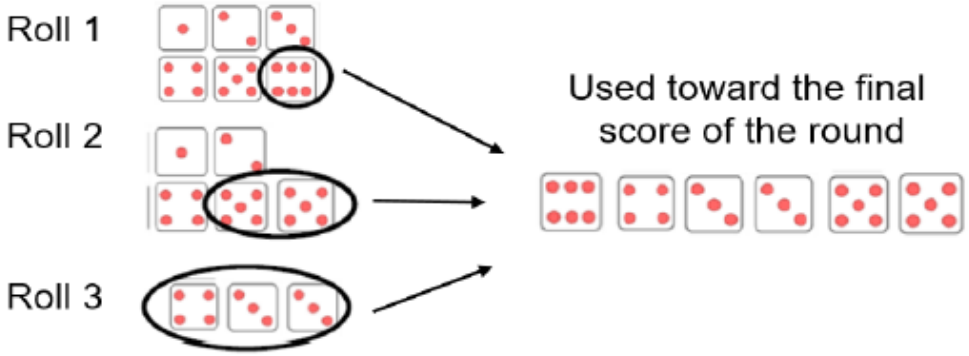
Materials: six dice, note pad and pencil

Note: A **turn** consists of rolling the dice **three** times in succession. The score is calculated by adding the number of dots on the side of the dice that land facing up.

Goal: Reach the highest number first.

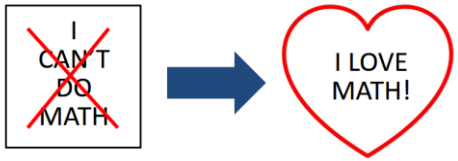
The Game: Player 1 rolls all six dice. He or she must use at least one dice from each roll towards their score for that round. The remaining dice get rolled two more times, with at least one dice taken from the second roll and then all remaining dice taken for the final roll.

Example:



Scoring: Players add or count the final number of dots on the facing dice and record their scored on a T-chart. New scores are added to previous round's scores as the game progresses. A target number or number of turns can be set prior to the start of the game for an end point of the game.

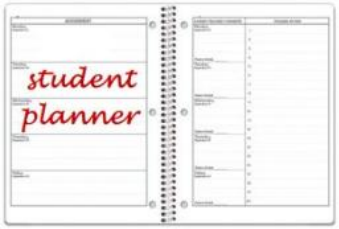
Wrap Up



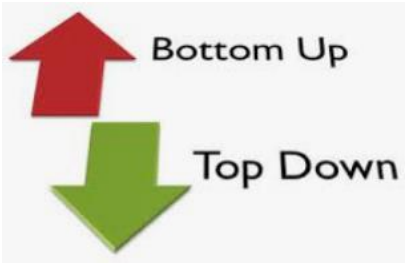
- Change your message

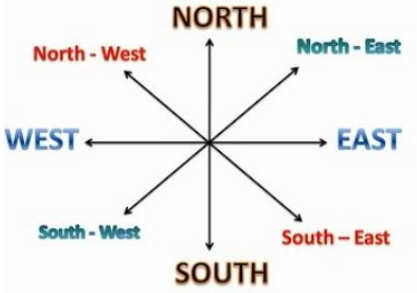
- Use paper maps, calendars, and planners

- Use coins and dollar bills



- Use directional language





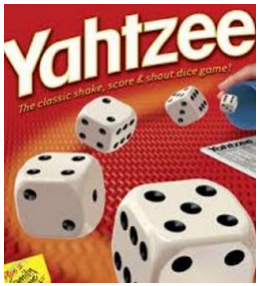
Play Games


Blokus

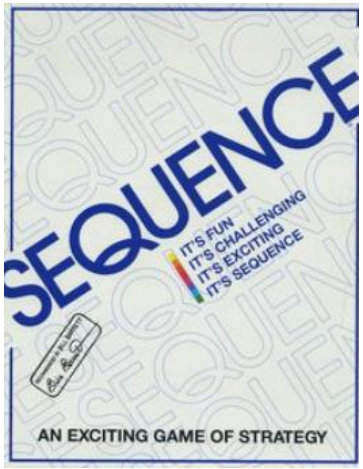

FLASH!
THE LIGHTNING FAST GAME!


SOLID WOOD
CRIBBAGE

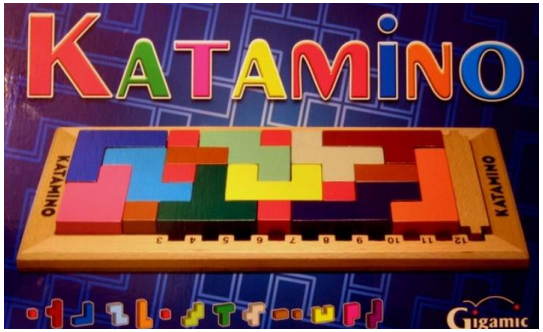

sumoku
sumoku


Yahtzee
The classic shake, score & shout dice game!


MONOPOLY


SEQUENCE
IT'S FUN
IT'S CHALLENGING
IT'S EXCITING
IT'S SEQUENCE
AN EXCITING GAME OF STRATEGY


MASTERMIND
5 PLAYERS


KATAMINO
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Thank you!

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