

### 3rd Grade

## Math Summer Work for the 2018-19 School Year

- Keep a log of the Math games you play
- Play two games in June, two games in July, and one game in August
- Play with an adult and they must verify with a signature with the **log page**
- Try three different games

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Math game choices:

### Multiplication War!

**Materials:** a deck of cards, a timer

#### How to play:

1. Shuffle the deck of cards and deal them face down, giving each player an equal number of cards until the deck runs out. Each player keeps his cards in a stack. Assign picture cards, such as jacks, queens, and kings, a value of 10. Give aces a value of either 11 or 1.
2. Demonstrate to your child how to play the game: Each player turns two cards face up, reads the number sentence and supplies the answer. For example, if your child draws a 5 and a 4, he says  $5 \times 4 = 20$ . If you draw a 7 and an 8, then your number sentence is  $7 \times 8 = 56$ . Because your product is larger, you win the four cards and you put them at the bottom of your pile.
3. If each of you has a number sentence with the same product, then it's war! Each player puts four cards face down and turns up two of them. The player with the largest product wins the eight cards.
4. Set up the timer and play the game for 10 to 15 minutes. When the timer goes off, each player counts his cards. The player with the most cards wins. If one player runs out of cards before the time is up, then the other player wins.

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### Uno Flip!

**Materials:** The number cards from a pack of Uno cards, Post-it notes, paper and pen/pencil

#### How to play:

1. Write a + symbol onto a post-it note and an = symbol on a post-it note and place on the table face up to form an addition equation, leaving room for the Uno cards to sit between the symbols.

2. Divide your Uno number cards into two piles and place piles as shown in the photo above.
  3. Flip over one card from each pile and place it into the addition equation.
    - For mental maths, say the answer out loud as quickly as you can.
    - To practise writing equations, write the addition sentence, including the answer, onto your sheet of paper.
  4. Continue to flip over two cards at a time and say or record each answer.
    - To revise times tables with Uno flip, swap the addition symbol for a multiplication symbol. Proceed as per the mental math or written equation examples above.
- *Adjust the difficulty level of the game by limiting the Uno cards to those containing higher or lower number values.*
  - *Add a level of competitiveness to the game by playing with two players competing to see who can answer to the problem first.*

## Pyramid: Make Ten!

**Materials:** a deck of cards

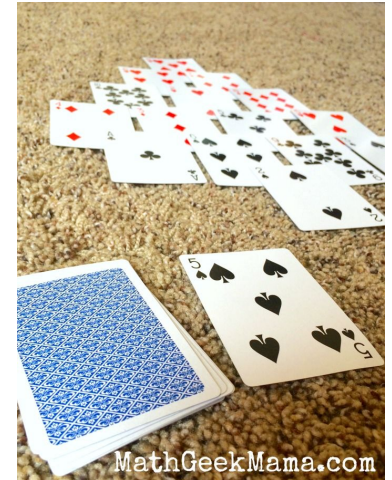
### How to play:

1. Remove all face cards (except Ace, which will represent the number one) and jokers from your deck of cards and shuffle well. Then arrange your cards into a pyramid with 6 rows, as shown below, with each row slightly overlapping the previous row. Place remaining cards in a deck, face down, off to the side.
2. The goal is to remove cards in the pyramid by “making ten” with two cards. (Or removing a ten card, as it is already equal to ten). However, you can only remove cards that are completely uncovered. Therefore, at the start of the game, you can only use the bottom row of the pyramid to make ten. So for example, in the game shown to the right, I was able to remove a nine and an ace to make ten. (There were actually two nines and two aces in the bottom row, so I did this twice.)
3. Then, I was able to remove the ten in the next row, because it had been completely uncovered.
4. At this point, all that was available was an ace, a two and a seven. No two cards remaining could make ten, but the game is not over!



Remember the deck of cards off to the side? These can be drawn from to try and find a needed card. So when there is no other option in your pyramid, draw a card from the deck. Continue to draw until you can make another ten. Remove those cards, and continue to play in the same way. If you make it through the entire deck, you can flip them over and begin drawing again.

5. The game is over when you can no longer remove cards from your pyramid!
6. Once you are stuck and can no longer remove any more cards, add all the remaining cards to determine your score. The person with the smallest number wins!



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## Subtraction War!

**Materials:** a deck of cards, a timer

### How to play:

1. Shuffle the deck of cards and deal them face down, giving each player an equal number of cards until the deck runs out. Each player keeps his cards in a stack. Assign picture cards, such as jacks, queens, and kings, a value of 10. Give aces a value of 1.
2. Demonstrate to your child how to play the game: Each player turns two cards face up, reads the number sentence and supplies the answer. For example, if your child draws a 5 and a 4, he says  $5 - 4 = 1$ . If you draw a 7 and an 2, then your number sentence is  $7 - 2 = 5$ . Because your result is larger, you win the four cards and you put them at the bottom of your pile.
3. If each of you has a number sentence with the same answer, then it's war! At this point, you'll reverse the math "operation" and do an addition problem. Each player puts four cards face down and turns up two of them. The player with the sum wins all eight cards.
4. Set up the timer and play the game for 10 to 15 minutes. When the timer goes off, each player counts his cards. The player with the most cards wins. If one player runs out of cards before the time is up, then the other player wins.

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Your log is on the next page...

Date:	Game:	Adult name:	Adult Signature:	Any notes or comments? Score?
JUN				
JUN				
JUL				
JUL				
AUG				