

# MATH

GRADE 7&8



CATHOLIC DISTRICT SCHOOL  
BOARD OF EASTERN ONTARIO

## LEARN AT HOME



## DAY 3

### MEAN, MEDIAN, MODE

Using a deck of cards, deal each player 5 cards. Players are asked to find the mean (or median or mode) of their 5 cards. The highest value gets 2 points to add to their running total. The first player to reach 10 points wins.

### TRAPEZOIDS

What equation would you write to help you solve the following problem? How would you solve each one?

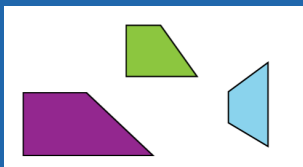


Figure out the height of a trapezoid with the following requirements:

- a top base that is half the length of the bottom base
- a height that is triple the length of the top base
- an area of 72 cm sq

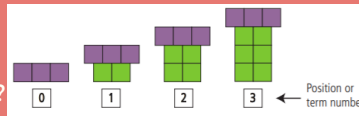
## DAY 1

### TARGET 75

The goal is to be the player whose total is closer to 75, without going over. Each player gets exactly 6 rolls. Player 1 rolls a die. She multiplies the number rolled by any number between 1 and 5, or by 10. She records the total. For example, if Player 1 rolls a 3, and she chooses to multiply it by 5, then she would write "15." Player 2 takes a turn. On Player 1's next turn, she adds her new product to her previous total. Players continue to take turns until each player has had 6 turns. The player whose total is closer to 75, without going over, wins.

### WHAT'S YOUR PATTERN?

Using building blocks, create a pattern that grows, shrinks or repeats. Challenge your family to determine how the pattern is changing or repeating. Can they extend your pattern?



## DAY 2

### SALUTE

Two players each draw a card without seeing its value. These players hold their cards up against their foreheads, with the numbers on the cards facing outward (players can see each other's card, but not their own). The third player determines the sum of the two cards, then says the sum aloud. By hearing the sum, and seeing the other player's card, each player holding a card tries to identify the number on his or her own card. The first player to correctly identify this number wins.

### WORD GAME

A word game uses these tiles. Choose a word, then change the letter values so your word has half the value.



## DAY 4

### BINGO

Materials: bingo chips, blank bingo cards, and a standard deck of cards; Aces are 1, Jacks are 11, Queen's are 12 and King's are 13. Each player creates a 5x5 Bingo Card: Players write numbers in their bingo card squares. Strategically choose multiples of the numbers 1 to 13. Do not write any number more than once. Shuffle the playing cards, and place them in a pile face down. One player turns over the top card. Any bingo card number that is a multiple Of the top card can get a bingo chip. For example, if a jack was turned up, bingo cards values of 11, 22, 33, or 44, etc, would get a bingo chip.

### PREDICT HOW MANY

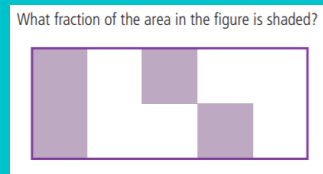
Try this one out with a few different numbers until you see a pattern. Once you notice a pattern in the answers, challenge a friend. Determine their initial number using the rule you figured out from above. Magic? No. Math!

Choose a number.  
Double it.  
Add 4.  
Multiply by 3.  
Divide by 6.

## DAY 5

### THE BIG PICTURE

Take a look at the pictures below:



The Big Nickel in Sudbury is 9 m wide. About how many nickels would it take to cover the face of the Big Nickel?



What other graphics or pictures can you create that have an equal shaded area to the image above?

### FRACTION FUN

How can you use lines of symmetry to help you fold paper into eighths? What other fractions would be easy to create by using lines of symmetry?

Two dice each have the numbers 1, 2, 3, 4, 5 and 6 on their faces. How do the probabilities of rolling a sum of 4 and rolling a sum of 7 compare?