## More or Less: A Dice Activity for Grades 6-8

PURPOSE / SKILL: To build a better understanding of positive and negative numbers, multiplication, and subtraction.

## MATERIALS:

Pencil and paper to create a game board and record information; Dice, or access to online dice roller (https://rolladie.net/) ; access to a calculator to help fact check.

## INSTRUCTIONS:

Roll two dice and multiply the dice to get your center number. Record that number in the middle box of the board.

Fill in the outside boxes recording the number that is 10 more, 10 less, 1 more and 1 less.

## ACTIVITY:

Game Board shape:



## POSSIBLE NEXT STEPS:

- Pick a different number to add on - 5 more, 20 more...
- Record numbers that are 10 times more/larger ( x 10 ) than the centre number; 10 times less/smaller ( $\div 10$ ) (100,1000, 10, 000)
- Ask: what do you notice? What if it was 100,000 times larger? 100,000 times smaller?
- Record the number that is DOUBLE ( $\times 2$ ) and HALF ( $\div 2$ )
- Record two sets of numbers that add to make a sum of the centre number; or that multiply to make a product that is the centre number.
- Have someone else create the "rule" and complete the chart - the other player has to investigate to determine what operations occurred to complete the chart.


## FINISHED PRODUCT

Game 1 -Roll two dice and add together, then Add and subtract 10 ( left and right) and 20 ( top and bottom) from the centre Game 2 - multiply dice together, and then multiply and divide by 10 and 100


