#### Quick Maths Games



## Take it Away

- Can use any dice depending on what you want to focus on.
- Each child start at a same chosen number e.g. 500.
- Roll dice and take away amount rolled.
- Race to zero!



#### Top Tips:

Children to write out subtraction method each time. e.g 500 - 19 = 500 - 20 + 1 = 481, 481 - 12 = 481 - 10 - 2 = 469 etc.

#### Odds Win

- Two of the same dice and multilink cubes.
- Roll the two dice and add the totals.
- If the total is an odd number, child builds tower using multilink.
- First child to a tower of ten is the winner.



## Strike it Out

- First player chooses a number and crosses it out e.g. 3. Then chooses another number and crosses that out e.g. 8. Finally, they circle the sum or difference of the two numbers and write down the calculation. e.g. 3 + 8 = 11.
- The second player must start by crossing off the circled number e.g. 11 and then chooses another number to cross out e.g. 9 and then circles the sum or difference of the two numbers and writes down the calculation e.g 11 + 9 = 20.
- Play continues in this way.



• The winner of the game is the player who stops their opponent from being able to go.

# Beat That



- Roll the dice and put them in order to make the highest number possible. If you roll a 4 and an 6, for example, your best answer would be 64. Using 3 dice, a roll of 3, 5 and 2 should give you 532, and so on. Write down your answer, pass the dice, and challenge the next player to Beat That!
- Play in rounds and assign a winner to each round. You might want to use the printable score charts to keep track.
- For a change, try making the smallest number possible! This is a great game for reinforcing the concept of place value. Encourage children to explain their reasoning.

### Beat That Score Sheet

Ca a	Player 1	Player 2	Player 3	Player 4
Round 1				
Round 2				
Round 3				
Round 4				
Round 5				
Total				
Winner				

## Dotty Six

- You need a partner, 1-6 dice and a grid like this.
- Take turns to throw the dice and draw that number of dots in one of the boxes on the grid.
- Put all of your dots in one of the boxes. You can't split them up and you can't have more than six dots in a box.
- When a box is full, you could put a tick in the corner like this:
- Keep going until there are three ticks in a row or column or diagonal. The winner is the person who puts the last tick.





## Multiplying Multiples

- In partners number yourselves 1 and 2.
- Player 1 will be the hundreds and player 2 will be the ones.
- You are each going to roll the dice and then find the product of the two numbers.
- Remember player 1 you are the hundreds so if you roll a 6 this becomes 600 etc. If player 2 then rolls a 3 your calculation will be 600 x 3 =
- First child to say the correct answer is the winner. (Check your partner is correct before you give them the point!)
- Keep score. First child to 10 is the winner!

Variations:

• Use tenths, thousands, both be hundreds etc.



### Two Dice

- Children roll two dice and add together the totals.
- Children can count spots or use number facts.
- Children write out calculation. e.g. 5 + 3 = 8
- What possible combinations can you get on two 1-6 dice?

Variations

• Use other numbered dice.



## Tug of War

#### My -20 to 20 number line

#### -20 -19 -18 -17 -16 -15 -14 -13 -12 -11 -10 -9 -8 -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 h

- One player is called "PLUS. The other is called "MINUS" so decide who is who.
- Plus moves from left to right and Minus moves from right to left. (The children may be encouraged to think about why that might be.)
- Place a counter on 0. Take it in turns to throw the two dice and add up the numbers on the two dice.
- Move that number of places in your direction.
- If the counter reaches -20, Minus has won and so, of course if the counter reaches 20, Plus has won.

## Dicey Addition

- Can use 0-9 dice or 0-9 cards.
- Game 1
- Each of you draw an addition grid like this:



- Take turns to throw the dice or turn over number cards. After each throw of the dice, you each decide which of your cells to put that number in.
- Throw the dice four times each until all the cells are full.
- Whoever has the sum closer to 100 wins.

• Each of you draw an addition grid like this:



- Throw the dice nine times each until all the cells are full.
- Whoever has the sum closest to 1000 wins.
- There are two possible scoring systems: A point for a win. The first person to reach 10 wins the game or each player keeps a running total of their "penalty points", the difference between their result and 1000 after each round. First to 5000 loses.
- You can vary the target to make it easier or more difficult.

• Each of you draw a subtraction grid like this:

- Throw the dice eight times each until all the cells are full.
- Whoever has the difference closest to 1000 wins.
- There are two possible scoring systems: A point for a win. The first person to reach 10 wins the game or each player keeps a running total of their "penalty points", the difference between their result and 1000 after each round. First to 5000 loses.
- You can vary the target to make it easier or more difficult, perhaps including negative numbers as your target.

- Each of you draw a multiplication grid like this:
- ×
- Throw the dice four times each until all the cells are full.
- Whoever has the product closest to 1000 wins.
- There are two possible scoring systems: A point for a win. The first person to reach 10 wins the game or each player keeps a running total of their "penalty points", the difference between their result and 1000 after each round. First to 5000 loses.
- You can vary the target to make it easier or more difficult.

• Each of you draw a division grid like this:

- Throw the dice five times each until all the cells are full.
- Whoever has the answer closest to 1000 wins.
- There are two possible scoring systems: A point for a win. The first person to reach 10 wins the game or each player keeps a running total of their "penalty points", the difference between their result and 1000 after each round. First to 5000 loses.
- You can vary the target to make it easier or more difficult.

## Round the Two Dice

- There are two dice. Could use 1-6 or 0-9
- When the dice are rolled they can be combined in two different ways to make a 2-digit number.
- For example, if I roll a 2 and a 3 I can combine them to make 23 or 32. Now round each of these numbers to the nearest 10: 23 rounds to 20 and 32 rounds to 30.
- Repeat for other rolls of the dice.

- CA 5 2
- Do both of the numbers you make ever round to the same multiple of 10?
- Could vary this to make decimal numbers and round to the nearest whole number.

### Race to 100

- Children use dice or 0-9 cards.
- Each partner starts on 0.
- Roll two dice or turn two cards over. Add the two numbers together and add this number to your current number.
- First player to 100 wins.



#### Dicey Area and Perimeter

- Decide on your target score e.g. 10.
- Decide who will go first.



- Player 1 throws the two dice and finds their product.
- Player 1 must then draw as many rectilinear shapes as possible which have either an area or a perimeter equal to the product of the dice.
  Player 1 scores 1 point for each correct shape.
- Player 2 throws the dice, finds their product and draws as many shapes as possible in the same way.
- The winner of the game is the first to reach the agreed target score.

	Place	Value	Yahtzee	Score	Card
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Category	8-digit number			
Number with 8 in the hundreds place				
Number with 5 in the ones place				
Number with 2 in the tens place				
Number whose tens and hundreds digits add up to 6				
Number whose hundred and ones digits add up to 9				
Number whose digits add up to 11				
Number with two of the same digits				
Number with three of the same digits				
WILD! Any number can be written here.				
f you are unable to fill in a number for any category at the end of your turn, place an X beside any available category. At the end of the game, compare the number you wrote in each category with the number your opponent wrote. If you wrote the greater number for that category, circle it and give yourself 1 point.				

Place Value Yahtzee Score Card				
Category	8-digit number			
Number with 3 in the hundreds place				
Number with 5 in the ones place				
Number with 2 in the tens place				
Number whose tens and hundreds digits add up to 6				
Number whose hundred and ones digits add up to 9				
Number whose digits add up to 11				
Number with two of the same digits				
Number with three of the same digits				
WILD! Any number can be written here.				
f you are unable to fill in a number for any category at beside any available category. At the end of the game,	the end of your turn, place an compare the number you wrot			

in each category with the number your opponent wrote. If you wrote the greater number for that category, circle it and give yourself 1 point.

Place Value Yahtzee Score Card		Place Value Yahtzee Score Card		
Category	4-digit number	Category 4-digit number		
Number with 3 in the hundreds place		Number with 3 in the hundreds place		
Number with 5 in the ones place		Number with 5 in the ones place		
Number with 2 in the tens place		Number with 2 in the tens place		
Number with 6 in the thousands place		Number with 6 in the thousands place		
Number whose thousands and ones digits add up to 9		Number whose thousands and ones digits add up to 9		
Number whose digits add up to 13		Number whose digits add up to 13		
Number with two of the same digits		Number with two of the same digits		
Number with three of the same digits		Number with three of the same digits		
WILD! Any number can be written here.		WILD! Any number can be written here.		
f you are unable to fill in a number for any category at the end of your turn, place an X beside any available category. At the end of the game, compare the number you wrote in each category with the number your opponent wrote. If you wrote the greater number for that category, circle it and give yourself 1 point.		If you are unable to fill in a number for any category at the end of your turn, place an X beside any available category. At the end of the game, compare the number you wrote in each category with the number your opponent wrote. If you wrote the greater number for that category, circle it and give yourself 1 point.		

Place Value Yahtzee Score Card		Place Value Yahtzee Score Card		
Category	6-digit number	Category 6-digit number	•	
Number with 8 in the hundreds place		Number with 8 in the hundreds place		
Number with 5 in the ones place		Number with 5 in the ones place		
Number with 2 in the hundred thousands place		Number with 2 in the hundred thousands place		
Number with 6 in the thousands place		Number with 6 in the thousands place		
Number with 4 in the tens place and 1 in the ten thousands place		Number with 4 in the tens place and 1 in the ten thousands place		
Number whose hundred thousands and tens digits add up to 9		Number whose hundred thousands and tens digits add up to 9		
Number whose digits add up to 21		Number whose digits add up to 21		
Number with three of the same digits		Number with three of the same digits		
WILD! Any number can be written here.		WILD! Any number can be written here.		
f you are unable to fill in a number for any category at the end of your turn, place an X		If you are unable to fill in a number for any category at the end of your turn, place an X		
beside any available category. At the end of the game, compare the number you wrote in each category with the number your opponent wrote. If you wrote the greater		in each category with the number your opponent wrote. If you wrote the greater		
number for that category, circle it and give yourself 1 point.		number for that category, circle it and give yourself 1 point.		

Place Value Yahtzee Score Card		Place Value Yahtzee Score Card		
Category	Decimal	Category	Decimal	
Number with 8 in the hundredths place		Number with 3 in the hundredths place	·	
Number with 5 in the ones place	·	Number with 5 in the ones place	·	
Number with 2 in the thousand ths place	·	Number with 2 in the thousandths place	·	
Number with 6 in the tenths place	·	Number with 6 in the tenths place	·	
Number with 4 in the tens place and 1 in the hundredths place	·	Number with 4 in the tens place and 1 in the hundredths place	·	
Number whose ones and thousandths digits add up to 9	·	Number whose ones and thousandths digits add up to 9	·	
Number whose tenths and hundredths digits add up to 6	·	Number whose tenths and hundredths digits add up to 6	·	
Number with three of the same digits	·	Number with three of the same digits	·	
WILD! Any number can be written here.	·	WILD! Any number can be written here.	·	
If you are unable to fill in a number for any category at the end of your turn, place an X beside any available category. At the end of the game, compare the number you wrote in each category with the number your opponent wrote. If you wrote the greater number for that category, circle it and give yourself 1 point.		If you are unable to fill in a number for any category at the beside any available category. At the end of the game, of in each category with the number your opponent wrow number for that category, circle it and give	he end of your turn, place an X compare the number you wrote te. If you wrote the greater e yourself 1 point.	

#### Greater Than or Less Than?

- Roll two dice. Use three symbols = < >
- Children write out number sentences e.g 4 > 2 etc.
- Children compete against each other to get the bigger number. Score a point if they roll the bigger number. First child to 10 is the winner.
- Variations: Children roll dice 4 times to get two two digit numbers etc.



## Roll, Slide and Cover

- Choose a player to go first.
- Take turns rolling the dice.
- Slide the dice together to make a fraction.



- Cover the same fraction on the board (board on next slide).
- If the fraction is already covered, the player misses a turn.
- The winner is the player with the most fractions covered in the end.

