Dice Games
Homework ideas

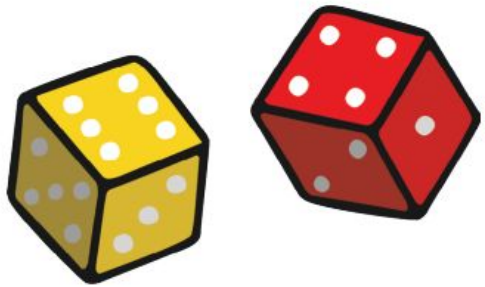
Dice Subtraction 4-in-a-Row

You will need:

- 2 dice
- 2 different coloured sets of 13 counters

The aim of the game is to get four of your own counters in a row.

Roll the two dice. Take the smaller number away from the bigger number and place a counter on that number. Take it in turns until a player wins or the board fills up.



5	0	2	4
2	1	3	1
0	3	0	4
5	1	3	5

Dice Addition 4-in-a-Row

You will need:

- 2 dice
- 2 different-coloured sets of 13 counters

The aim of the game is to get 4 of your own counters in a row.

Roll the 2 dice. Add the numbers together and place a counter on that number.

Take it in turns until a player wins or the board fills up.



2	5	10	8	3
4	11	6	4	10
5	7	2	12	8
11	6	4	9	5
12	3	8	6	9

Roll and Solve
Addition and Subtraction within 10



You will need:

- a game board for each player
- a dice
- pencil crayons or counters



Instructions:

You can play this game in pairs or groups (each child will need their own game board).

- Take turns to roll the dice. Answer the first available question on the row that matches the number on the dice.
- If the question is answered correctly, shade in the question using a pencil crayon or cover it with a counter.
- The winner is the first player to make one unbroken line from one side of the game board to the other.

Roll and Solve Addition and Subtraction within 10

	4 + 3 = _____	9 − 4 = _____	3 + 7 = _____	8 − 4 = _____	6 + 2 = _____	10 − 6 = _____
	5 − 3 = _____	6 + 0 = _____	8 − 2 = _____	5 + 5 = _____	7 − 4 = _____	3 + 4 = _____
	2 + 4 = _____	7 − 3 = _____	6 + 1 = _____	9 − 5 = _____	4 + 3 = _____	9 − 6 = _____
	7 − 3 = _____	4 + 5 = _____	10 − 4 = _____	8 + 2 = _____	6 − 4 = _____	3 + 7 = _____
	4 + 4 = _____	8 − 1 = _____	7 + 2 = _____	6 − 5 = _____	8 + 1 = _____	5 − 3 = _____
	10 − 5 = _____	4 + 2 = _____	9 − 2 = _____	2 + 8 = _____	7 − 0 = _____	4 + 6 = _____

Roll and Solve Addition and Subtraction within 10

	1 + 3 = _____	7 − 4 = _____	8 + 2 = _____	9 − 5 = _____	5 + 3 = _____	10 − 5 = _____
	7 − 3 = _____	1 + 6 = _____	7 − 1 = _____	5 + 4 = _____	9 − 2 = _____	5 + 4 = _____
	2 + 7 = _____	9 − 3 = _____	6 + 3 = _____	10 − 1 = _____	4 + 0 = _____	8 − 5 = _____
	10 − 0 = _____	4 + 5 = _____	8 − 7 = _____	3 + 5 = _____	7 − 3 = _____	5 + 2 = _____
	5 + 3 = _____	8 − 3 = _____	7 + 2 = _____	10 − 6 = _____	4 + 1 = _____	7 − 4 = _____
	9 − 2 = _____	7 + 3 = _____	9 − 2 = _____	2 + 4 = _____	8 − 1 = _____	8 + 2 = _____

Roll and Solve Addition and Subtraction within 10

	10 − 4 = _____	5 − 3 = _____	2 + 4 = _____	3 + 7 = _____	9 − 6 = _____	6 + 4 = _____
	6 − 4 = _____	5 + 5 = _____	8 − 1 = _____	4 + 2 = _____	8 − 0 = _____	2 + 8 = _____
	4 + 5 = _____	9 − 6 = _____	4 + 6 = _____	9 − 4 = _____	6 + 2 = _____	9 − 2 = _____
	5 + 5 = _____	3 + 7 = _____	4 + 3 = _____	6 + 2 = _____	10 − 6 = _____	2 + 8 = _____
	6 + 0 = _____	10 − 5 = _____	3 + 7 = _____	10 − 5 = _____	9 − 4 = _____	7 − 1 = _____
	6 − 5 = _____	3 + 4 = _____	8 − 4 = _____	7 + 2 = _____	9 − 6 = _____	2 + 8 = _____

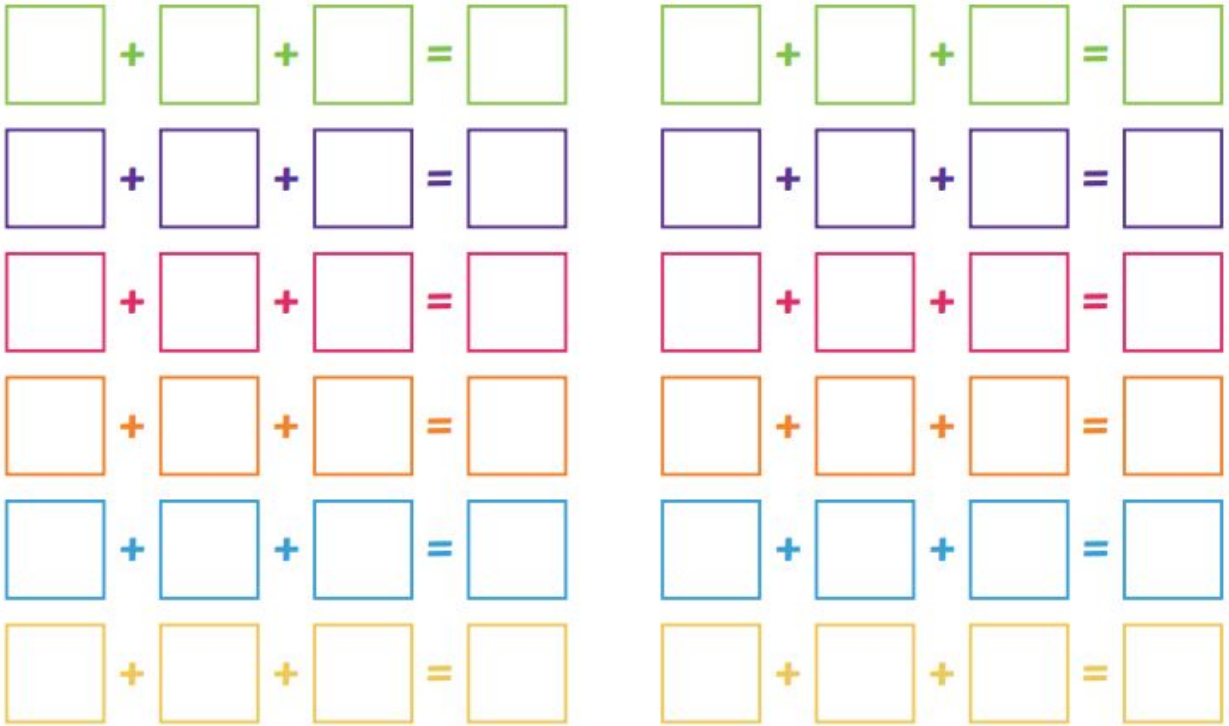
Dice Addition Game

Roll three dice and write the numbers in the first 3 boxes. Add the numbers and write the answer in the final boxes.

☐☐	+	☐	=	☐☐		☐☐	+	☐	=	☐☐
☐☐	+	☐	=	☐☐		☐☐	+	☐	=	☐☐
☐☐	+	☐	=	☐☐		☐☐	+	☐	=	☐☐
☐☐	+	☐	=	☐☐		☐☐	+	☐	=	☐☐
☐☐	+	☐	=	☐☐		☐☐	+	☐	=	☐☐
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Dice Addition Game

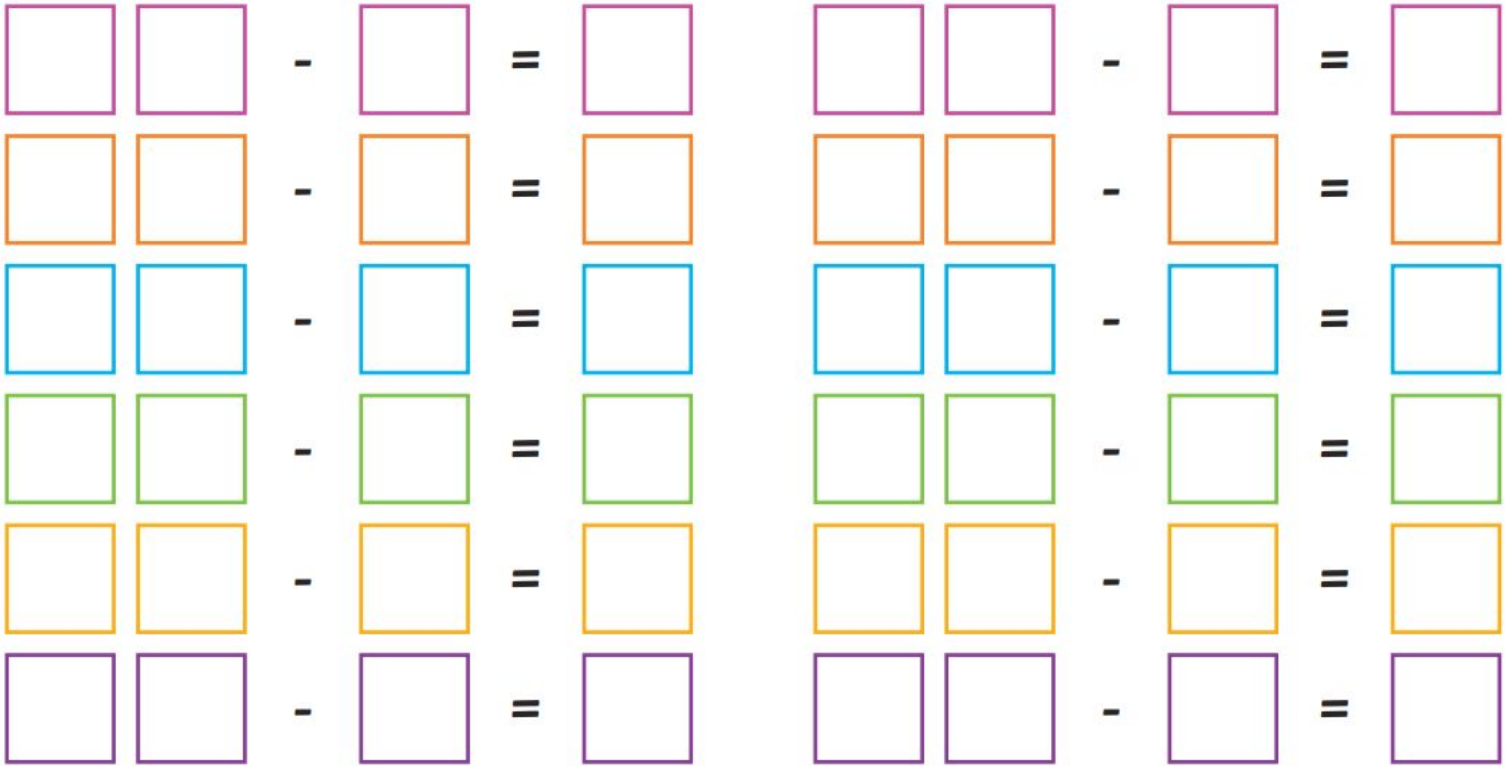
Instructions: Roll three dice and place them in the boxes. Add the numbers and mark the answer in the box.



Dice Subtraction Game

Instructions

Roll a pair of dice and write the numbers in the boxes. Subtract the numbers and mark the answer in the box.



Snakes and Ladders
2, 3, 4 and 5 Times Tables

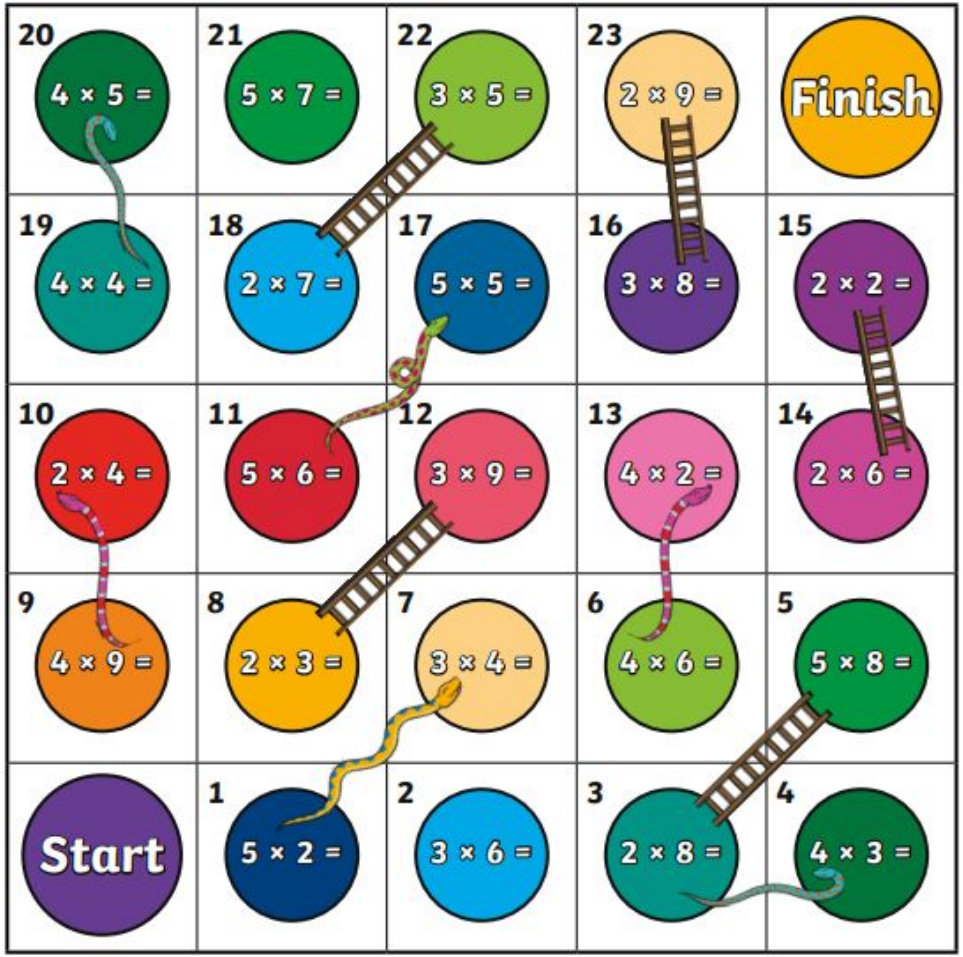
You will need:

- the Snakes and Ladders Board Game;
- a dice;
- a counter per player.



How to play:

1. Players take it in turns to roll the dice. The player with the highest number goes first, the player with the second highest goes second and so on.
2. When it's their turn, players move the counter the number of spaces shown on the dice and answer the calculation they land on.
3. If the answer given to the calculation is correct, play continues as usual:
   - landing on a snake's head - the player's counter slides down;
   - landing at the bottom of a ladder - the player's counter climbs up.
4. If the answer given to the calculation is incorrect, the player misses a go.
5. The first player to reach the finish is the winner!



Snakes and Ladders Addition and Subtraction within 10



You will need:

- dice
- 1 counter per player

How to play:

1. Players take it in turns to roll the dice.
2. Each player moves their counter the number of spaces shown on the dice. If they land on a snake's head, they slide down to its tail. If they land at the bottom of a ladder, they go to the top of it.
3. Then, the player must answer the calculation they have landed on.
4. If the answer given to the calculation is correct, play continues as usual.
5. If the answer given to the calculation is incorrect, the player misses their next turn.
6. The first player to reach the finish is the winner!



Finish 100	99	98	97	96	95	94	93	92	91
9 − 1	6 − 3	7 + 0	3 + 3	2 + 6	4 − 1	5 + 3	0 + 2	5 − 3	7 − 2
81	82	83	84	85	86	87	88	89	90
0 + 10	1 + 2	5 − 3	10 − 2	7 + 3	1 + 4	6 − 2	10 − 2	7 + 1	9 − 0
80	79	78	77	76	75	74	73	72	71
3 − 2	1 + 4	7 − 3	3 + 2	6 − 1	3 + 6	10 − 3	1 + 9	7 − 1	7 + 2
61	62	63	64	65	66	67	68	69	70
7 + 2	10 − 0	9 − 3	9 + 1	8 − 3	6 + 2	9 − 2	8 + 1	8 − 1	7 + 0
60	59	58	57	56	55	54	53	52	51
7 − 1	9 − 2	2 − 1	3 + 5	7 − 3	7 + 2	7 − 1	9 + 1	3 + 7	2 + 8
41	42	43	44	45	46	47	48	49	50
1 + 6	8 − 2	9 − 1	5 + 3	4 + 4	6 − 2	8 + 1	1 + 9	6 + 3	9 − 1
40	39	38	37	36	35	34	33	32	31
10 − 3	10 − 1	5 + 1	1 + 5	7 + 3	6 − 2	2 + 5	9 − 0	10 − 7	8 − 3
21	22	23	24	25	26	27	28	29	30
5 + 3	4 − 0	1 + 7	8 − 1	2 + 7	1 + 1	5 − 1	7 − 1	1 + 9	4 + 2
20	19	18	17	16	15	14	13	12	11
4 + 6	7 + 3	7 + 2	4 − 1	6 − 2	8 − 3	2 + 7	9 − 3	9 − 0	4 + 2
Start 1	2	3	4	5	6	7	8	9	10
8 + 1	7 − 2	6 − 1	5 − 3	3 + 4	6 − 2	4 − 2	3 + 1	5 + 2	6 − 1

Multiplication Dice Game

How to play:

1. Roll 2 dice.
2. Multiply both numbers together.
3. Colour your answer in on the grid or put a counter on it.
4. First one to colour 3 in a row wins!



20	10	18	4	24
36	1	16	3	3
5	24	9	15	5
9	36	2	20	6
12	15	10	8	30

Multiplication Dice Game

How to play:

1. Roll a pair of dice.
2. Multiply your 2 numbers.
3. Colour your answer in on the grid or put a counter on it.
4. First one to colour 4 in a row wins!



18	12	24	8	10	24	6	15
36	30	12	9	2	5	4	18
4	24	4	8	6	8	15	3
10	12	25	15	20	6	16	8
36	12	12	30	5	12	5	30
10	25	1	9	5	6	10	20
18	20	9	10	16	15	4	3
1	30	4	20	2	3	6	15

Multiplication Dice Game

How to play:

1. Roll a pair of dice.
2. Multiply your 2 numbers and remember the answer.
3. Roll 1 dice again and take away that number from your answer.
   If it goes below 0, re-roll the 2 dice.
4. Colour your final answer on the grid or put a counter on it.
5. First one to colour 5 in a row wins!

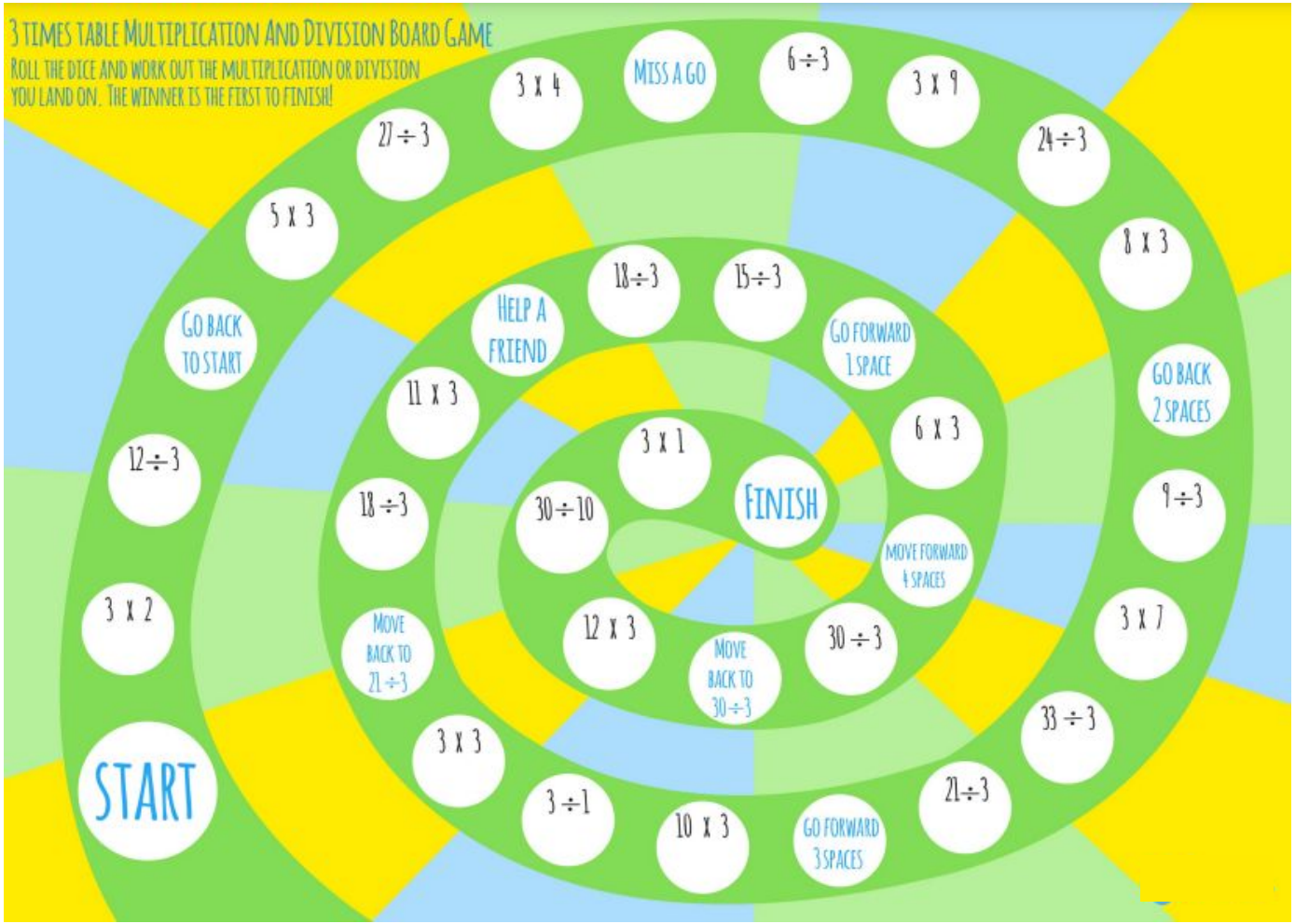


2	3	30	6	21	12	26	5
20	8	15	20	22	19	4	27
33	8	16	10	34	1	28	25
15	26	11	29	24	7	24	12
18	7	23	1	17	4	13	28
5	35	13	19	6	32	14	23
2	25	17	31	21	27	22	29
16	10	9	14	11	18	3	9

2× Table Multiplication and Division

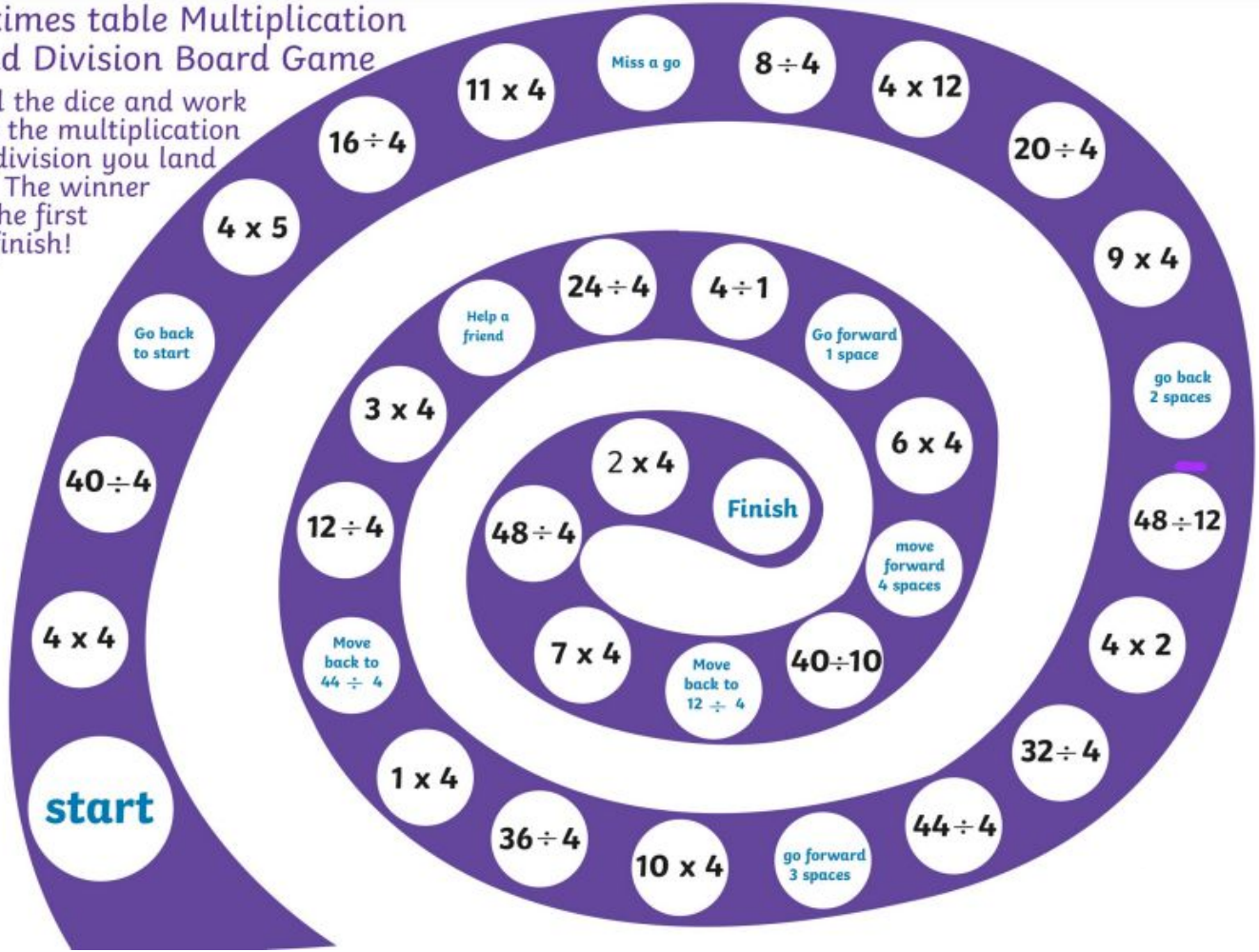
Roll the dice and work out the multiplication or division you land on. The winner is the first to finish!

Start					16 ÷ 2	2 ÷ 1	Move forward 1 space	11 × 2	
5 × 2					Help a friend			Move forward 4 spaces	
10 ÷ 2	Go back to start	7 × 2	24 ÷ 2		8 × 2			18 ÷ 2	
			4 × 2		40 ÷ 2	Move back to 10 ÷ 2		Move back to 16 ÷ 2	
20 ÷ 2	10 × 2	30 ÷ 2	Miss a go			7 × 2		12 × 2	
2 × 8						16 ÷ 2		9 × 2	
Go back 2 spaces	30 ÷ 2	9 × 2	46 ÷ 2	10 ÷ 2	Move forward 3 spaces	6 × 2		Finish	


3 TIMES TABLE MULTIPLICATION AND DIVISION BOARD GAME
ROLL THE DICE AND WORK OUT THE MULTIPLICATION OR DIVISION YOU LAND ON. THE WINNER IS THE FIRST TO FINISH!
START
3 x 2
12 ÷ 3
GO BACK TO START
5 x 3
27 ÷ 3
3 x 4
MISS A GO
6 ÷ 3
3 x 9
24 ÷ 3
8 x 3
GO BACK 2 SPACES
9 ÷ 3
3 x 7
33 ÷ 3
21 ÷ 3
GO FORWARD 3 SPACES
10 x 3
3 ÷ 1
3 x 3
MOVE BACK TO 21 ÷ 3
18 ÷ 3
11 x 3
HELP A FRIEND
18 ÷ 3
15 ÷ 3
GO FORWARD 1 SPACE
6 x 3
MOVE FORWARD 4 SPACES
30 ÷ 3
MOVE BACK TO 30 ÷ 3
12 x 3
30 ÷ 10
3 x 1
FINISH

4 times table Multiplication And Division Board Game

Roll the dice and work out the multiplication or division you land on. The winner is the first to finish!



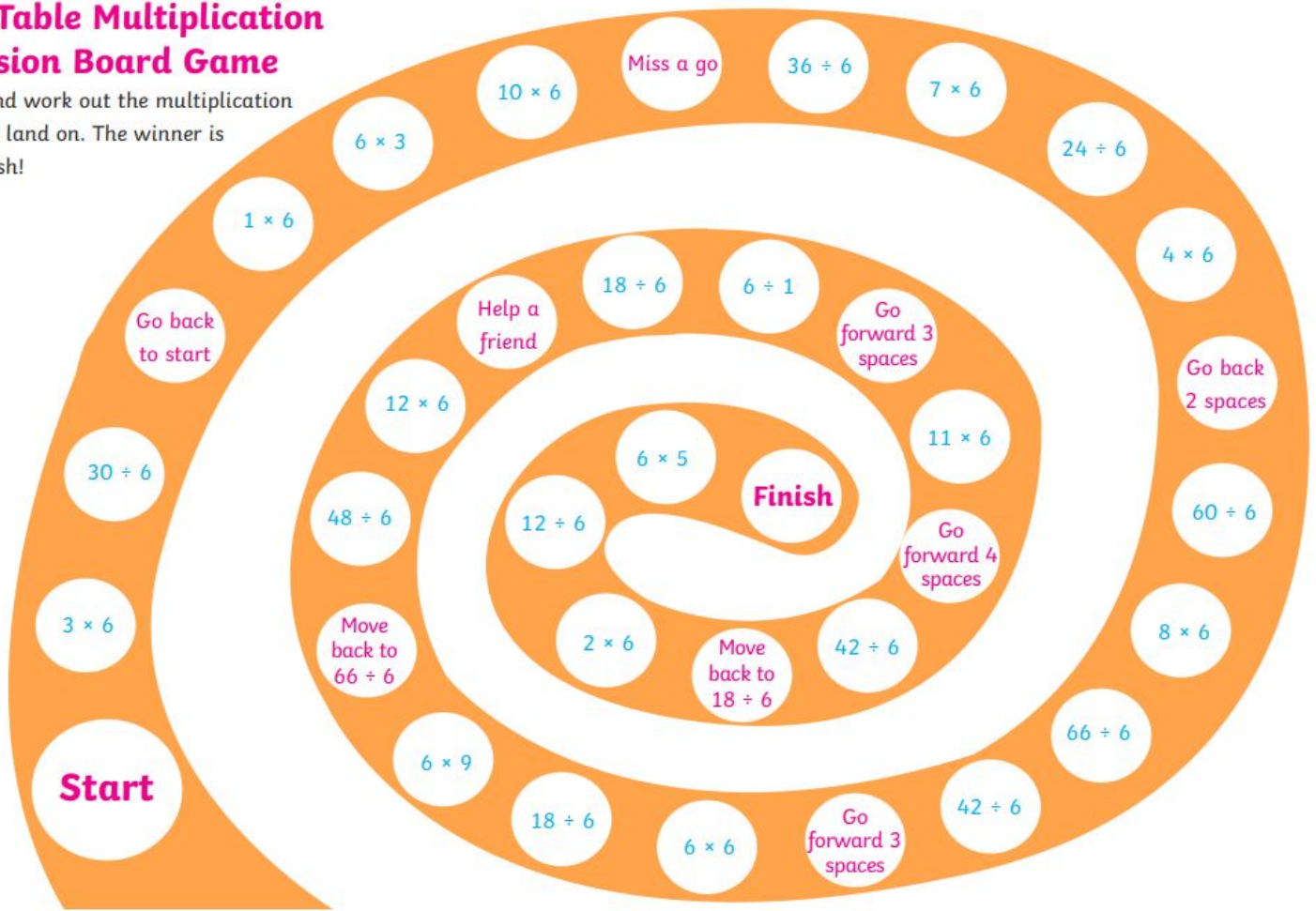
5× Table Multiplication and Division

Roll the dice and work out the multiplication or division you land on. The winner is the first to finish!

Start					35 ÷ 5	5 ÷ 1	Move forward 1 space	11 × 5
5 × 2					Help a friend			Move forward 4 spaces
25 ÷ 5	Go back to start	5 × 5	50 ÷ 10		8 × 5			55 ÷ 5
			3 × 5		40 ÷ 5	Move back to 45 ÷ 5		Move back to 35 ÷ 5
20 ÷ 2	10 × 5	35 ÷ 5	Miss a go			7 × 5		12 × 5
5 × 4						50 ÷ 5		15 × 5
Go back 2 spaces	60 ÷ 12	9 × 5	45 ÷ 5	10 ÷ 2	Move forward 3 spaces	6 × 5		Finish

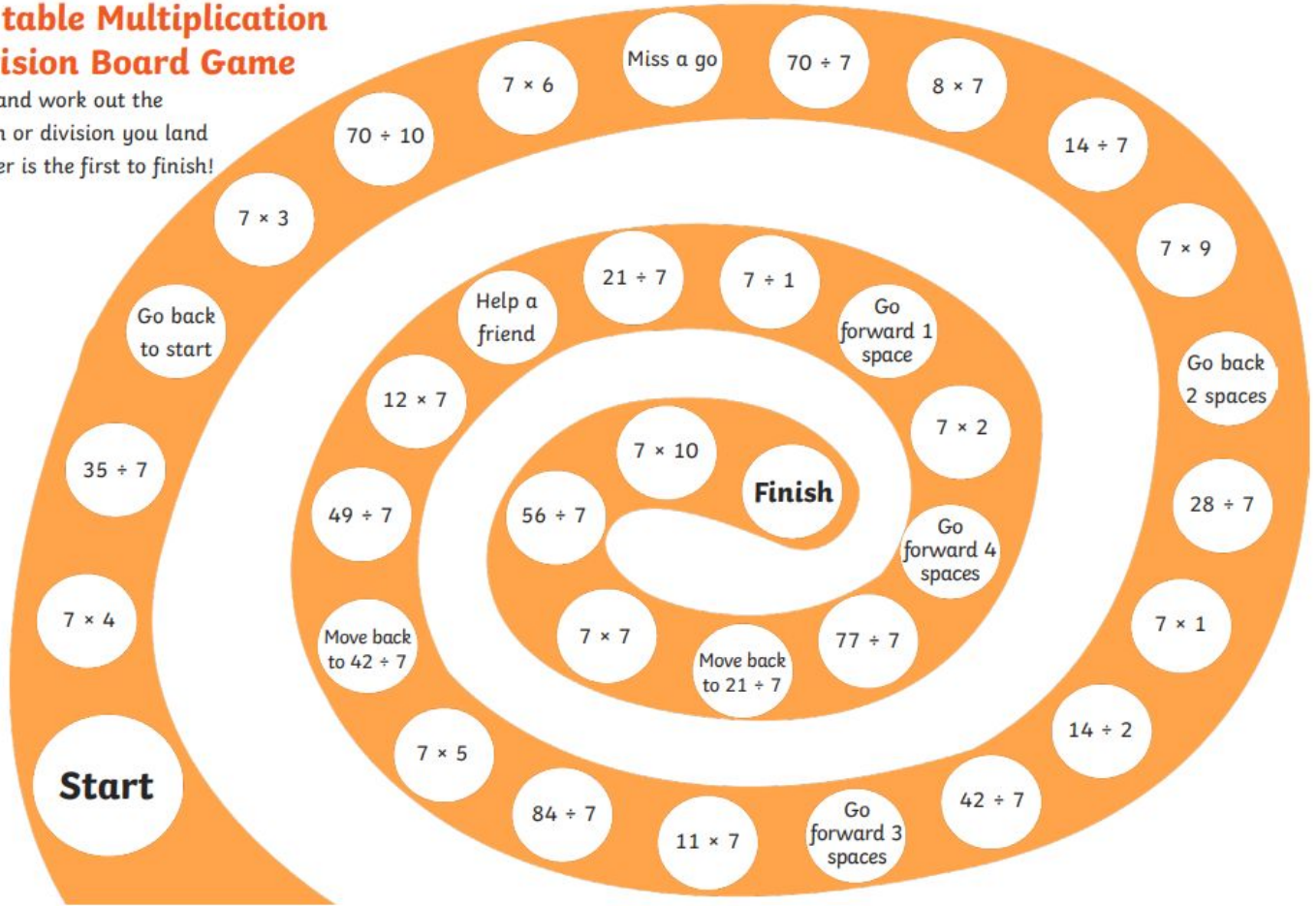
6 Times Table Multiplication and Division Board Game

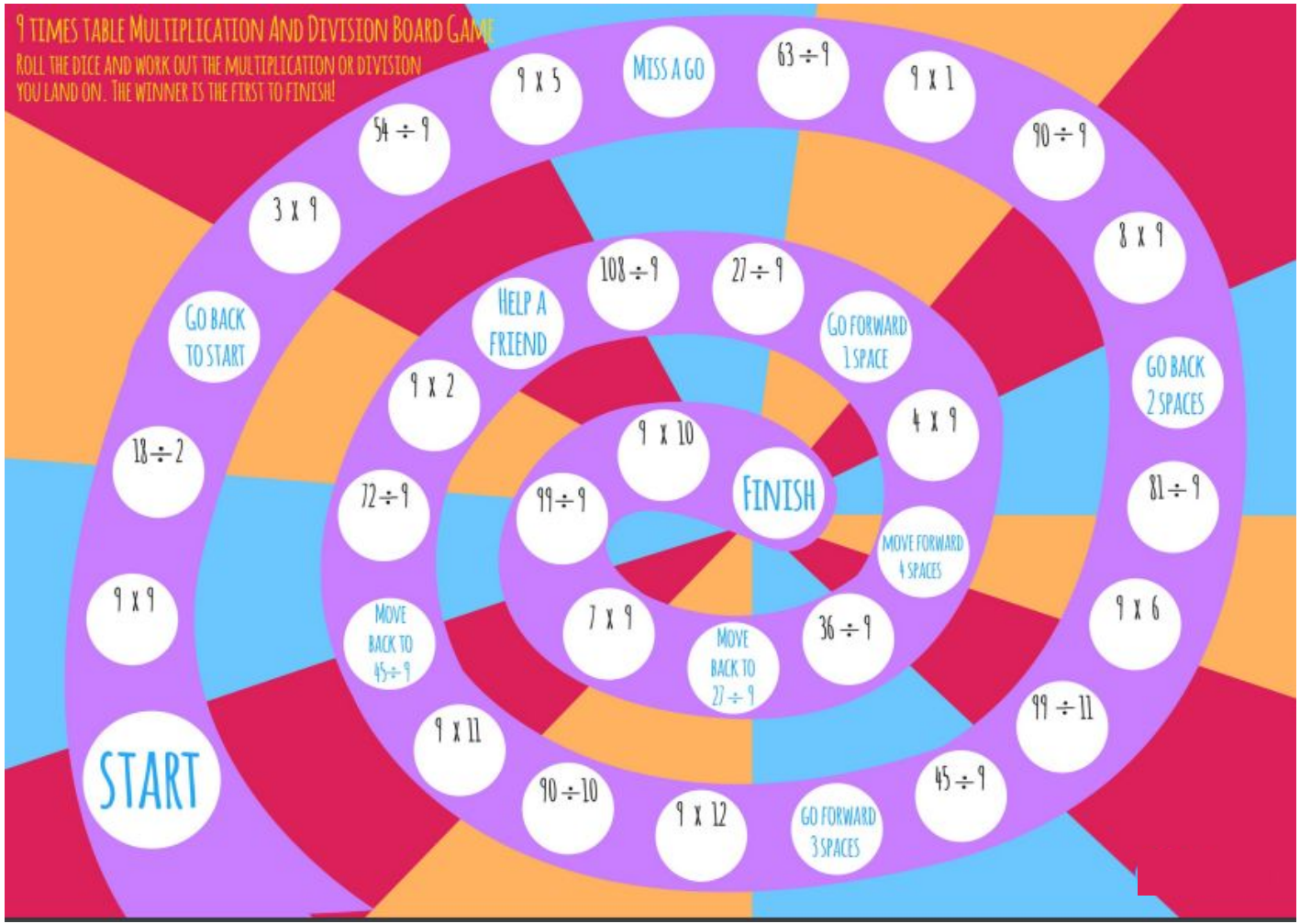
Roll the dice and work out the multiplication or division you land on. The winner is the first to finish!

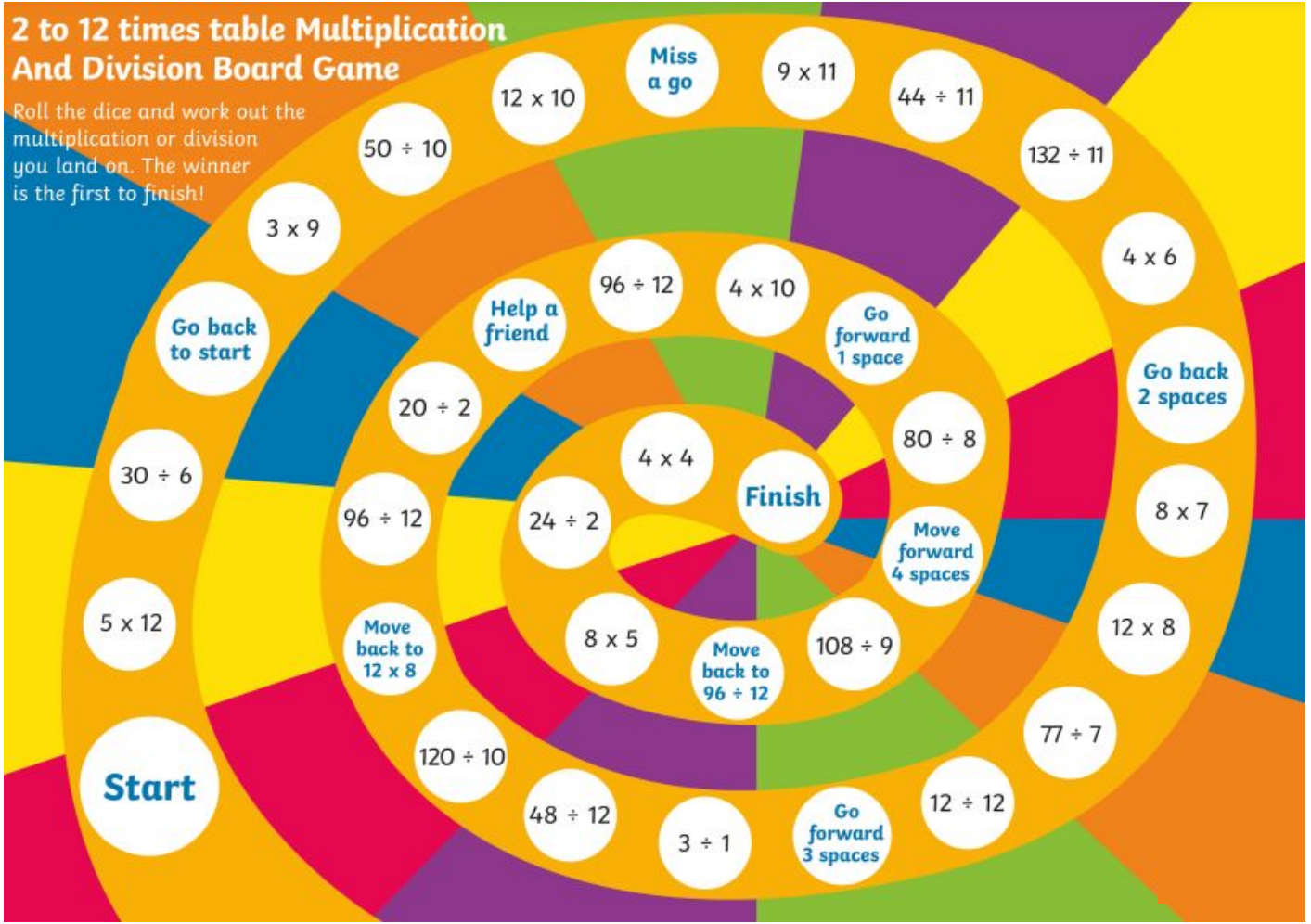


7 times table Multiplication And Division Board Game

Roll the dice and work out the multiplication or division you land on. The winner is the first to finish!




9 TIMES TABLE MULTIPLICATION AND DIVISION BOARD GAME
ROLL THE DICE AND WORK OUT THE MULTIPLICATION OR DIVISION YOU LAND ON. THE WINNER IS THE FIRST TO FINISH!
START
9 x 9
18 ÷ 2
GO BACK TO START
3 x 9
54 ÷ 9
9 x 5
MISS A GO
63 ÷ 9
9 x 1
90 ÷ 9
8 x 9
GO BACK 2 SPACES
81 ÷ 9
9 x 6
99 ÷ 11
45 ÷ 9
GO FORWARD 3 SPACES
9 x 12
90 ÷ 10
9 x 11
MOVE BACK TO 45 ÷ 9
72 ÷ 9
9 x 2
HELP A FRIEND
108 ÷ 9
27 ÷ 9
GO FORWARD 1 SPACE
4 x 9
MOVE FORWARD 4 SPACES
36 ÷ 9
MOVE BACK TO 27 ÷ 9
7 x 9
99 ÷ 9
9 x 10
FINISH


2 to 12 times table Multiplication And Division Board Game
Roll the dice and work out the multiplication or division you land on. The winner is the first to finish!
Start
5 x 12
30 ÷ 6
Go back to start
3 x 9
50 ÷ 10
12 x 10
Miss a go
9 x 11
44 ÷ 11
132 ÷ 11
4 x 6
Go back 2 spaces
8 x 7
12 x 8
77 ÷ 7
12 ÷ 12
Go forward 3 spaces
3 ÷ 1
48 ÷ 12
120 ÷ 10
Move back to 12 x 8
96 ÷ 12
20 ÷ 2
Help a friend
96 ÷ 12
4 x 10
Go forward 1 space
80 ÷ 8
Move forward 4 spaces
108 ÷ 9
Move back to 96 ÷ 12
8 x 5
24 ÷ 2
4 x 4
Finish

FIFTY



Equipment: 2 dice; 2 or more players

Objective: be the first player to reach 50 Instructions:

How to play

Taking turns, players roll two dice, one roll per turn. If they do not roll doubles, they do not score for that turn. If they roll doubles, they earn a score as follows:

- Double 1s, 2s, 4s, 5s = 5 points

- Double 6s = 25 points

- If they roll double 3s, their score up to that point is wiped out and they must restart accumulating points. The first player to reach 50 points wins.

KNOCK-OUT



Equipment: 2 dice; 2 or more players

Objective: to be the first player to reach 100; or have the highest score at the end of a predetermined number of rounds. (We prefer to play for 10 rounds.)

How to play: To set up the game decide if you will play to 100 or for a number of rounds. Chose 6, 7, or 8 as the "knock-out number." The knock out number can be the same for all players, or each player can have a different knock out number. We find the best way to play is with 7 as everyone's knock-out number. A round is complete when all players have had one turn. Taking turns, players roll both dice, if they do not roll the knock-out number the total score is recorded for that turn and they pass the dice to the player on their left. For example, if the roll is 2-3, the player earns 5 points. If they roll the knock-out number they receive no score for that round. But not only that, the player's accumulated score is "knocked-out" and the player must start again on their next turn. Only one roll per turn. Play until one player has achieved the game objective.

BEAT THAT



Equipment:
2 dice (up to 7 dice for older players)
Paper and pencil for scoring, or printable score chart

How to play

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 one of our 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. If you are playing with younger children, explain your reasoning out loud and encourage them to do the same.

DICE BATTLE

Equipment: two pairs of dice each and a collection of small items (counting bears, blocks, pom-poms, etc.).

How to play: Both players roll their dice and add their own up. Whoever has the highest answer takes an item from the other player. The battle can end when one player has no items left, after a set number of battles, after a set amount of time, or when the teacher calls “battles over.”



COIN ROLL

Equipment: pair of dice and a sheet with three columns:

How to play: Children can work independently or with a partner in this activity.
The first column shows the two dice as rolled for each turn.
The second column will show the total value of both dice numbers.
The third column will show the coins that can be used for that money value.
For example, you roll a 6 and a 3. You draw the die in column 1. In the second column, you write 6 + 3 = 9, and in the third column, you write the fewest coins you could use to make that amount.



FIVES AND TWOS

Equipment: five dice and a sheet to record players' totals for each round.

How to play: A player rolls all five dice at the same time. If a 5 or a 2 is rolled, put those aside. The player continues to roll the remaining dice until all dice show a 5 or 2. The players then add their dice up on the recording sheet. Whoever has the highest score for the round is the winner.



ROLL AND ADD TO 100

Equipment: Pairs of players will need a 100s chart, a pair of dice, and a crayon, marker, or colored pencil (different from each other).

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

How to play: Players roll the dice, add the two numbers together, put an “X” on that spot on the chart, then move ahead that many spaces and put another “X” on that one. Then it is the other player’s turn.

For example, the first player rolls 3 and 5. They put a blue X on 8, then move ahead eight more spaces and put another blue X on 16. That ends that turn. Now it’s the next player’s turn.

Continue playing until one player reaches 100.





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

Knockout

Before the game starts, decide on a score needed to win.

1. Each player chooses a 'Knockout' number. (e.g. 6, 7, 8 or 9).
2. Players take turns throwing both dice.
3. Add the numbers on both dice to give a total score.
4. If a player hits the 'Knockout' number, they lose the game.





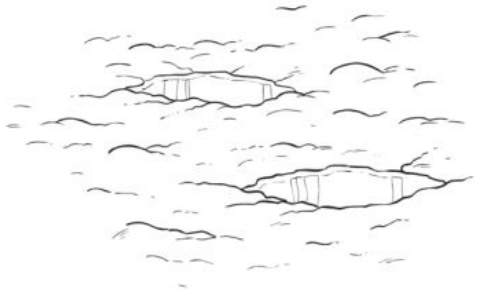
Beat That!



1. Each Player takes turns rolling two dice.
2. When a player has rolled the dice, they should place the dice in the order that will produce the largest number possible. For example, if a player rolled a 2 and a 5, they may choose 52 as their number to beat as that is a larger number than 25.
3. After each throw, player one challenges player two to 'Beat That'.
4. Play this game in rounds, assigning a winner of each round.

Stuck in the Mud

In this game, you can only score on a roll which does not include the numbers 2 and 5.



1. Choose a player to start and agree on a number of rounds you are going to play (5 works well).
2. Roll five dice. If you rolled a 2 or a 5, those dice are now 'Stuck in the Mud'.
3. When you do not roll a 2 or a 5, add up the total of the dice and remember it.
4. Roll the remaining dice, adding the totals until all your dice are 'Stuck in the Mud'.
5. Record your total and allow your partner to play.
6. The highest total at the end of the game wins the round.



Sit-Ups

1. Each Player takes turns rolling two dice.
2. Add up the total amounts shown from both dice.
3. Whoever scored the highest amount performs the number of sit-ups they rolled.

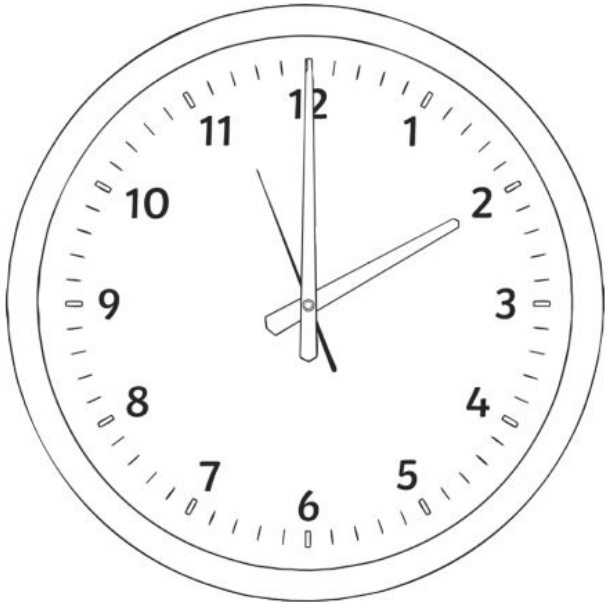


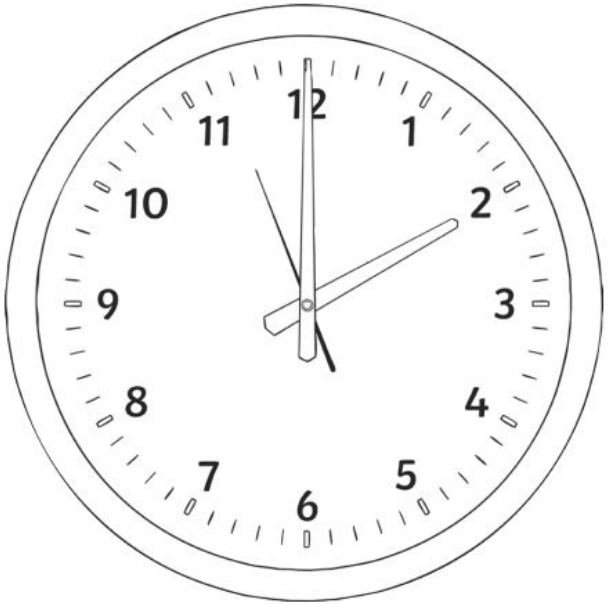


Round the Clock



1. Start by taking it in turns to roll two dice.
2. Use addition or subtraction in the quest to fill all hours on the clockface.
   For example, if a 6 and a 4 are rolled, 10 or 2 could be covered on the clock face.
3. The first person to cover the hours 1-12 wins.





Even the Scores

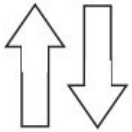


1. Take it in turns to roll one or two dice, depending on the number you are aiming to get on your board.
2. If you choose to roll two dice, add up the total amounts shown on both dice.
3. If you roll an even number, mark off the number you have rolled and roll again.
4. If you roll an odd number, hand the dice over to your partner for them to take their turn.
5. Repeat the game until one player has covered all of the even numbers on the board.

1	2	3
4	5	6
7	8	9
10	11	12

1	2	3
4	5	6
7	8	9
10	11	12

Higher or Lower



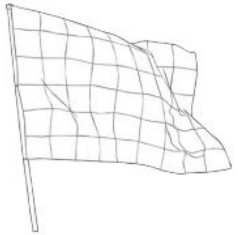
1. Take it in turns to roll two dice, adding up the total.
2. Guess whether the next roll will make a number that is higher or lower than the last.
3. Aim to consecutively move ten times up the board from start to finish.
4. If you guess incorrectly, it's your partner's turn to play.

1 START	2	3	4	5	6	7	8	9	10 FINISH

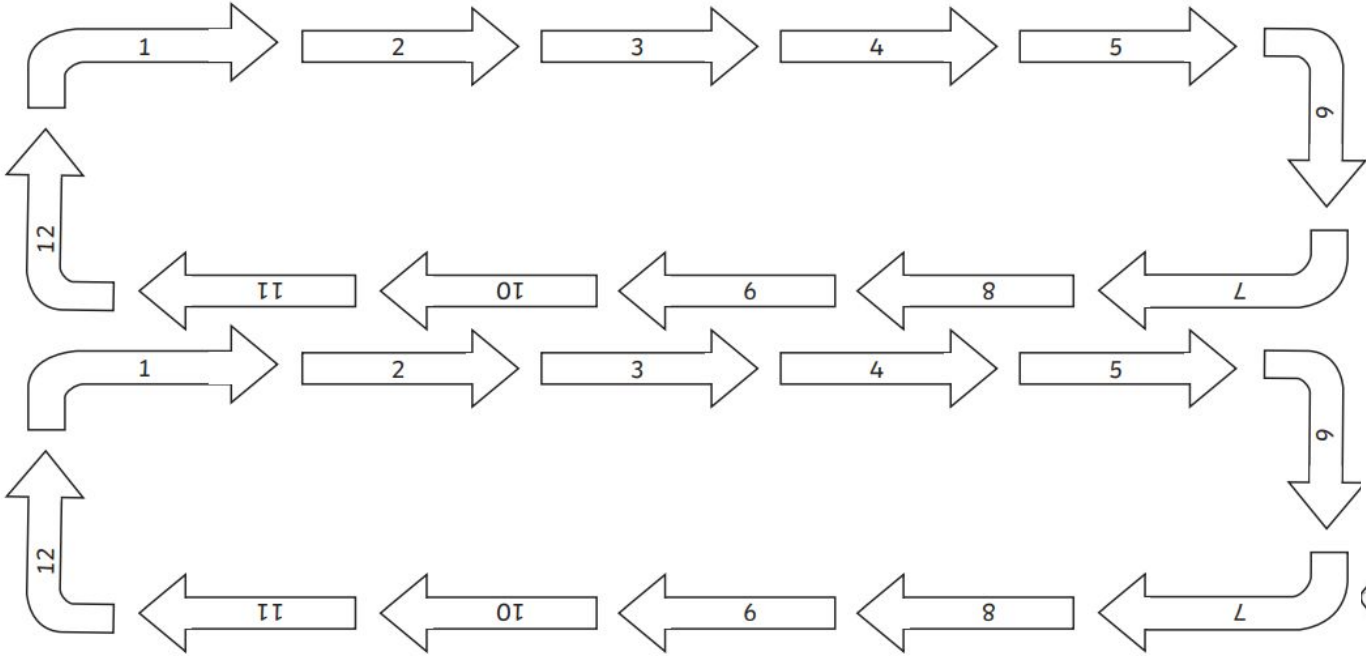


The Roll Race





1. Take it in turns to roll two dice.
2. Use addition and subtraction skills to colour in each section on the racetrack. For example, if a 6 and a 4 are rolled, either 10 (6 + 4) or 2 (6 – 4) could be coloured in on the racetrack.
3. The first player to travel round the track is the champion.
4. You must travel clockwise around the track.



Dice Battle

1. Grab as many dice as you have from every board game around the house.
2. Each player starts by throwing two dice each.
   The rest of the dice are placed in the middle.
3. Once each player has rolled, the highest score gains a dice from the middle.
4. Repeat the same until all dice are removed from the middle.
5. Whoever gains the most dice wins.





Tower Power

1. Each player rolls a dice twice, adding together the numbers they get in each roll.
2. Players build a tower using the same amount of blocks as their total.
3. Repeat, in turns, until your tower is about to collapse.
4. The winner is the player who has the tallest tower.
5. If your tower collapses, you lose this round.



21

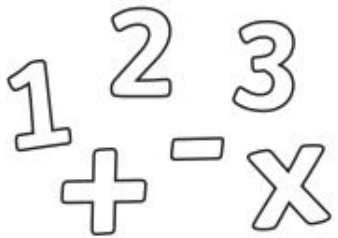
For this game, you will need access to 5 dice but you may not need to use them all in each turn.

1. Roll the first three dice and add up your score so far.
2. Make a decision: Stick or twist? If you stick, your partner has to beat your score.
3. If you twist, roll another die and add your total.
4. Decide again whether to stick or twist, before your partner tries to beat your score.
5. At the end of each turn, the player whose score is closest to 21 wins.



Calculations

1. Roll a die three times.
2. How many calculations can you create with the numbers you rolled?
3. The winner is the player who accurately creates the most calculations.





Make 20

1. Take turns to roll two dice.
2. Add or subtract the numbers rolled to give a total for each turn, with the aim of getting to a total score of 20.
3. Continue rolling, adding and subtracting until your total score is as close to 20 as possible.
4. When scoring, you can be one point under but not one point over 20.
5. At the end of each round, the player closest to 20 is the winner and gains a point.

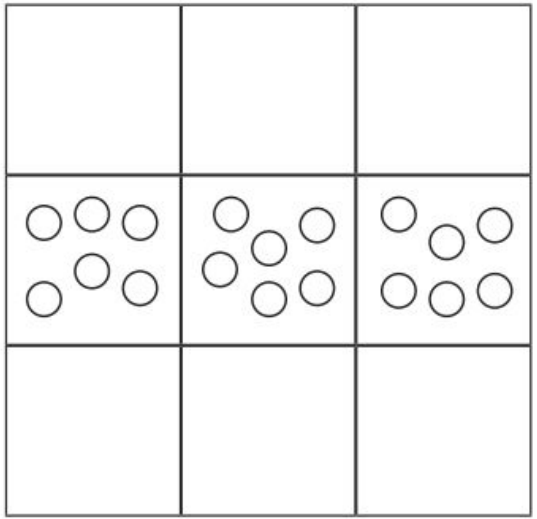




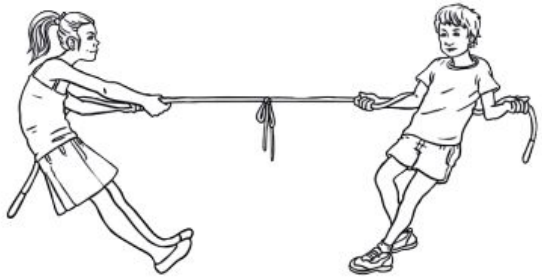
Dotty Six



1. Draw a 3 by 3 grid and choose one coloured crayon for each player; where possible, each player should have a different colour.
2. Take turns rolling a dice, drawing the number of dots you rolled into one of the spaces on the grid.
3. The aim of this game is to have six dots in a square and three sixes vertically, horizontally or diagonally.



Tug of War



1. Draw a number line like the example given and circle the number 14.
2. Player 1 moves their counter to the right of number 14 and Player 2 moves their counter to the left of number 14.
3. Take it in turns to roll two dice, adding the two numbers rolled.
4. Move your counter in your direction.
5. If their counter reaches 27 first Player 1 wins the game. If their counter reaches 1 first then Player 2 wins the game.

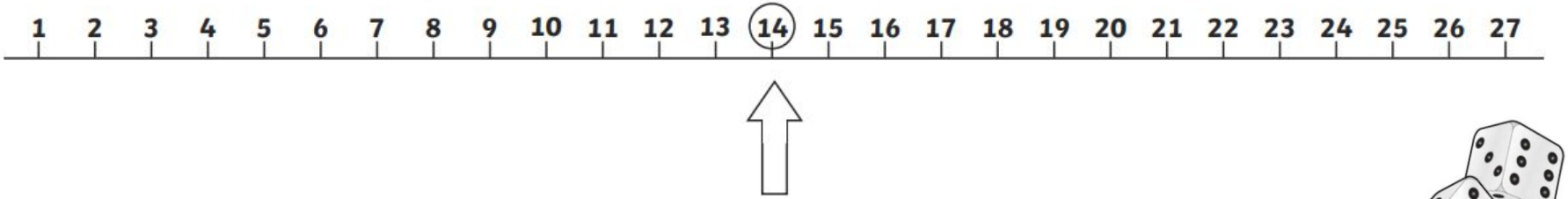




Table for 2

1. Every player starts on the number two.
2. Take turns rolling two dice.
3. Use addition and subtraction skills to make numbers in the two times table using the numbers you have rolled on the dice.
4. The winning player is the first to tick off every number in the two times table.

x2



20	
16	18
14	
10	12
8	
4	6
2	

Honeycomb Hexagons

1. Players take it in turns to roll two dice.
2. On their first turn, players must make a number on the first column of the Honeycomb Hexagons board (1, 6, 0 or 5) by adding or subtracting the numbers rolled.
3. On their next go, they must make a number on the next column of the Honeycomb Hexagons board (9, 4, 8, 3 or 7) and so on.
4. The first player to successfully move from one side of the board to the other wins.

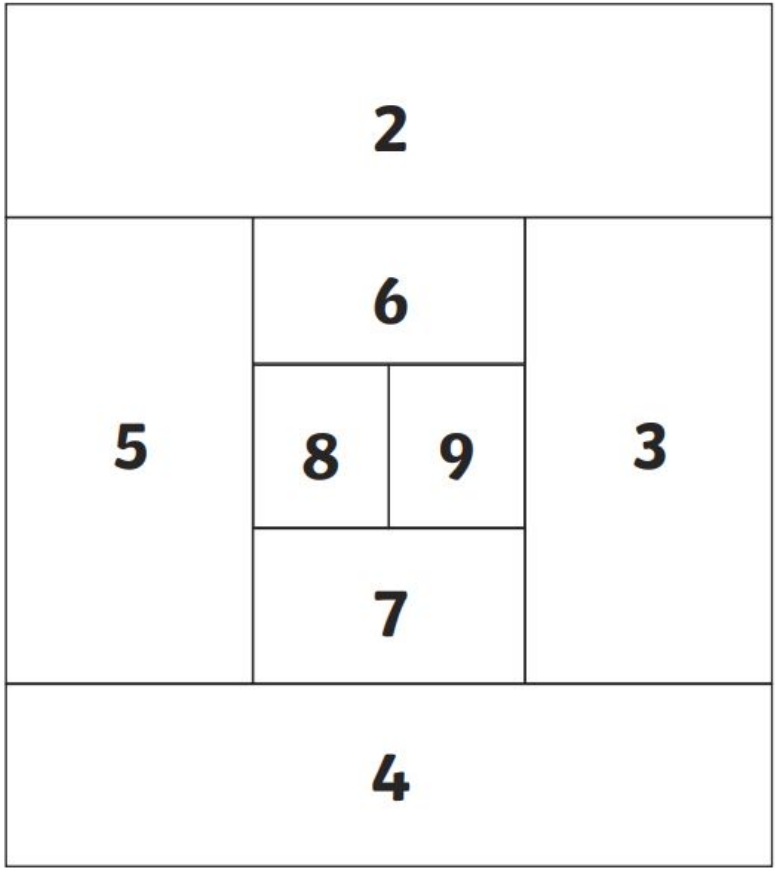


9	5	2	5			
1	0	3	0	1		
4	9	6	3			
6	5	1	2	9		
8	4	9	8			
0	1	0	7	4		
3	2	3	2			
5	9	8	0	7		
7	4	6	5			

Drop Zone

1. Take turns rolling a die onto the Drop Zone board.
2. When the die settles, players must multiply the number shown on the die by the number it landed on the board.
3. The larger the total, the more points you gain.
4. Players add up their total scores after five turns.
5. The player with the highest score wins.





DICE GAMES

THE ADD AND SUBTRACT GAME





Equipment: 2 players 2 sets of counters An ‘Add and Subtract’ game board 1 dice

How to play: Throw the dice Look at the grid and find an answer that matches the dice number Cover that number with a counter The winner is the player who covers the most numbers.

DICE GAMES

THE ADD AND SUBTRACT GAME



4 + 2	6 - 4	3 + 3	5 - 3	0 + 6
6 - 5	1 + 1	7 - 1	2 + 1	6 - 2
1 + 0	9 - 6	1 + 5	8 - 5	2 + 3
9 - 4	3 + 0	6 - 3	2 + 2	9 - 8
4 + 1	8 - 4	0 + 1	7 - 3	3 + 1

DICE GAMES

Cover the Windows





Equipment: 2 players A quantity of counters for both players 2 dice (1-6 spots or numbers) A window game board The window game board consists of two windows with identical numbers. Players sit side by side and play on their own window.

How to play: Players take turns to roll both dice, they add the numbers together and tell the other player the total. Next they both look for a combination of numbers on their own window that will add to this same total. For example, Billy rolls a 3 and 5. The total is 8, he could: Cover the 8 on his window with a counter; Cover the 1 and 7, or 2 and 6, or 3 and 5, or both 4s; Cover the 1, 1 and 6, or 1, 2 and 5... If a combination adding to the same total as the dice numbers is not visible then the player misses that go. Play continues with the other player rolling the dice and then both players looking to cover combinations on their own window. The first player to cover all of the numbers on his window is the winner. After a few plays most children begin to see potential strategies. For example, with the dice roll described above, it is probably better to cover the single 8 than the combination of 1, 1 and 6 since this leaves those smaller numbers for use later.


8 10 4
4 9 1 2 3
2 8 4 5 10
7 2 6 3 8
7 1 9 5 6
mathsticks.com
8 10 4
4 9 1 2 3
2 8 4 5 10
7 2 6 3 8
7 1 9 5 6


6 10 2
9 2 3 7 8
4 10 5 6 7
3 8 2 4 1
5 4 1 8 9
mathsticks.com
6 10 2
9 2 3 7 8
4 10 5 6 7
3 8 2 4 1
5 4 1 8 9


6 12 2
6 3 1 8 3
9 5 6 4 5
2 10 3 1 2
1 4 2 7 1
mathsticks.com
6 12 2
6 3 1 8 3
9 5 6 4 5
2 10 3 1 2
1 4 2 7 1


9 12 3
4 2 7 1 6
3 1 8 10 3
1 5 4 5 1
2 11 4 2 6
mathsticks.com
9 12 3
4 2 7 1 6
3 1 8 10 3
1 5 4 5 1
2 11 4 2 6

DICE GAMES

Dice Difference

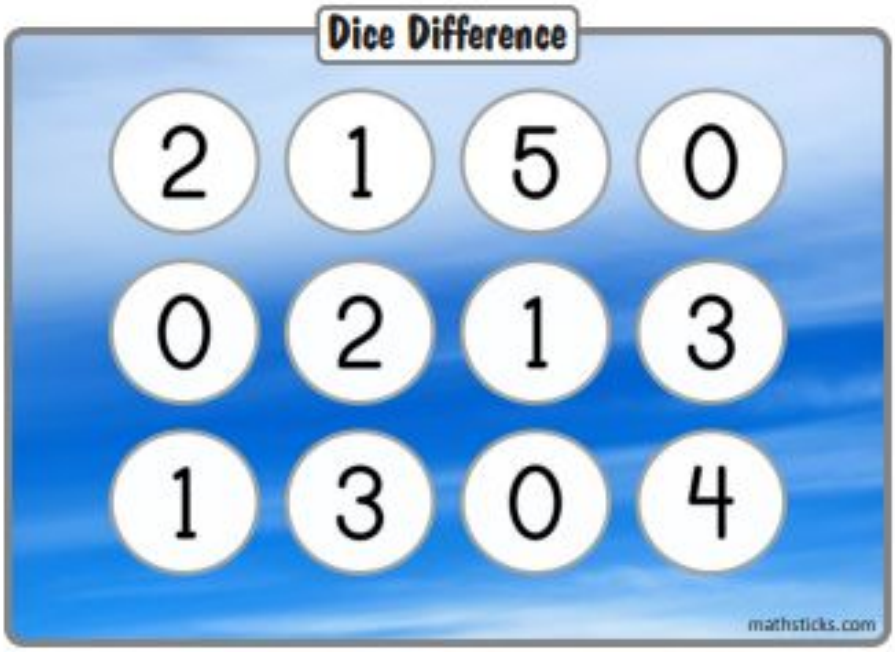


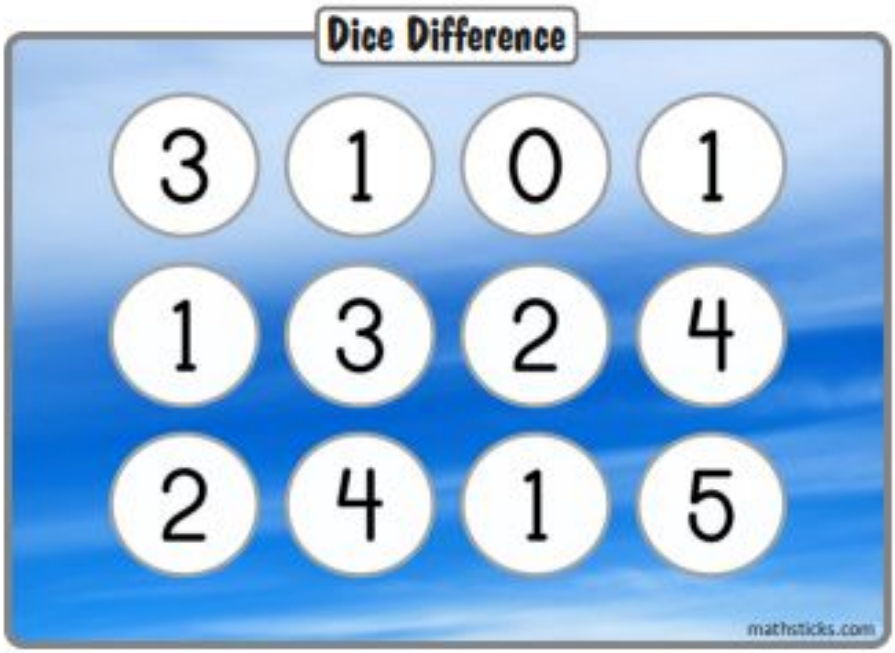
Equipment: 2 players, A ‘Dice Difference’ board for each player, A set of counters for each player, 2 dice

How to play: Players take turns to throw roll both dice. They can now find the difference between the dice numbers, locate this number on their board and cover it with a counter. If they cannot cover a number with a counter then they miss that go.

The winner is the first player to fill his/her board with counters.




Dice Difference
2 1 5 0
0 2 1 3
1 3 0 4
mathsticks.com


Dice Difference
3 1 0 1
1 3 2 4
2 4 1 5
mathsticks.com

DICE GAMES

Doubles





Equipment: 2 players 1 dice (1-6 spots) A set of 9 counters each A 'Doubles' board game

How to play: The 'Doubles' board features two sets of 9 numbers. Each child chooses which side of the board to use. They roll the dice, double the number shown and cover that number on their half of the board with a counter. If at any time they find that the number they need has already been covered, then they miss that turn. The winner is the first player to cover all of his/her numbers.

DICE GAMES

Doubles



6	10	4
8	6	10
2	12	8

8	4	6
2	6	12
4	2	10

DICE GAMES

BLOCKBUSTERS





Equipment: 2 players 2 dice 2 sets of counters A 'BlockBusters' gameboard

How to play: The players take it in turns to roll both dice. They must now make a number by adding or subtracting the two numbers shown on the dice. If they can create any number that is on the grid they may cover that number with one of their counters. If they cannot create an appropriate number the must miss that go. The winner is the player to get a line of counters across the grid

Development ideas: Give each player a game board of their own, this enables them greater freedom when choosing where to place their counter. Change the rule so that the winner is the first to create an unbroken line of four of hexagons, in any direction. Instead of restricting the game to addition and subtraction, allow the children to use any of the four rules of number.

DICE GAMES

BLOCKBUSTERS



	9		5		2	
1		0		3		0
	4		9		6	
6		5		1		2
	8		4		9	
0		1		0		7
	3		2		3	
5		9		8		0
	7		4		6	

	5		2		5	
1		3		0		1
	9		6		3	
2		1		2		9
	4		9		8	
7		0		7		4
	2		3		2	
8		8		0		7
	4		6		5	

DICE GAMES

Little Piggy





Equipment: 2 players 2 dice Paper and pencil to record calculations

How to play: The aim of this game is to be the first player to get to 50. The first player rolls both dice and finds the sum. He can keep rolling as long as he wants, adding all of the numbers to the sum. He can stop at any time, write down the score for that round and pass the dice to the other player. It sounds like a good idea to keep playing, but...

Be Warned! It could go wrong if you play too long.

If you roll a double 1 then that turns your score for that round to '0' and ends your go. If you roll a double 6 then that wipes out your entire score and you have to start again! Dare you play Little Piggy?

DICE GAMES

BRICKS





Equipment: 2 players one dice (1-6 spots) The Brick pattern worksheet

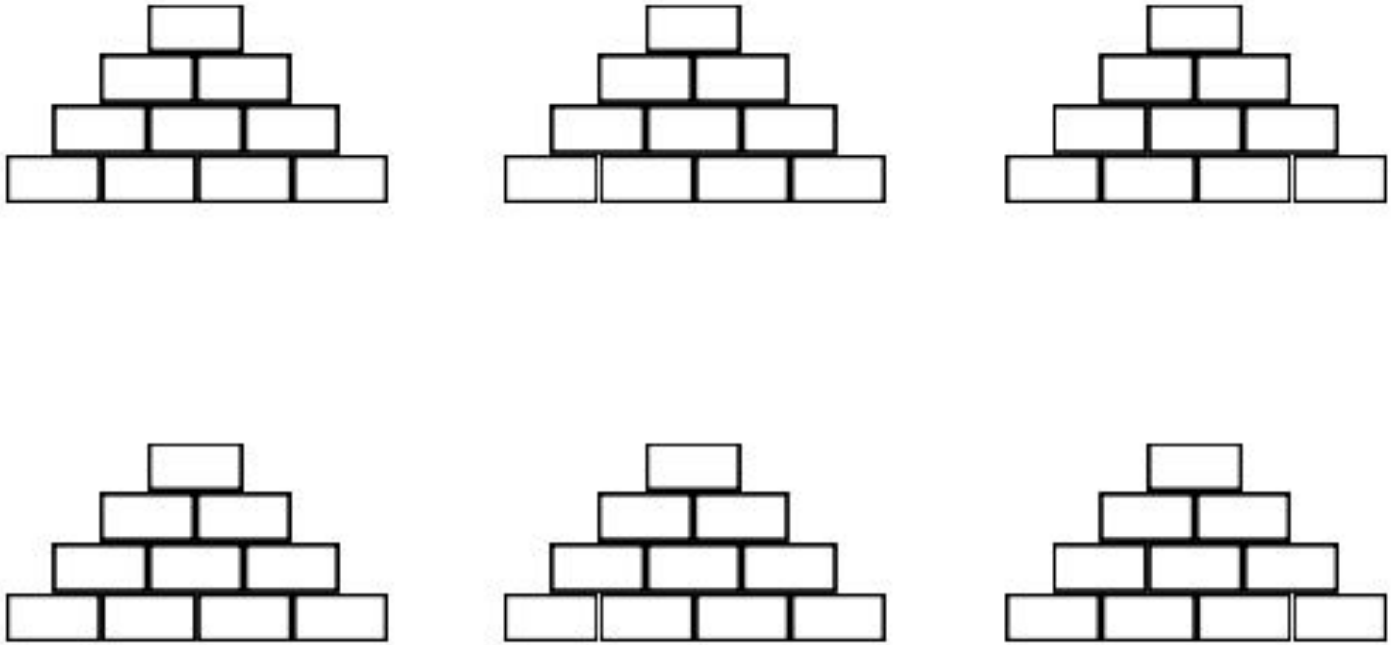
How to play: Each child will need a copy of the bricks sheet and a dice. They throw a 1-6 dice 4 times and fill in the bottom row of the brick pattern. Now complete the next row by adding the two boxes below each brick. The player who achieves the highest final number (at the top of the brick pattern) is the winner. Development ideas: Challenge the children to reorder their starting numbers, can they arrange them so that they get a different final total?

As an alternative: Children could roll the dice three times and place those numbers in the second row of the Brick pattern. Now they must choose appropriate numbers to place beneath the dice numbers to make the pattern work. In some cases this may mean they need to use negative numbers.

DICE GAMES

BRICKS





DICE GAMES

DICE CHOICE





You will need: 2 players 3 dice Coloured counters A 'Dice Choice' game-board

How to play: Give each pair the game-board. Throw the three dice and using only + and -, make the numbers on the grid. The winner is the player who covers the most numbers.

Development ideas: There are four different playing boards for this game. Once the children are familiar with the basic version using the first board, they can be introduced to the additional challenge of using a more advanced board. There is also a 'blank' version of the board so you (or the children) can create your own board as complex, or as easy as necessary. Ask the children to work together to find out: which numbers are the easiest to make if there any numbers they cannot make? Give the children a blank grid and allow them to make numbers of their own. What numbers do they choose and can they make them all? Ask the children to make their own grid but to use all four operations .

DICE GAMES

DICE CHOICE



0	1	2	3
4	5	6	7
8	9	10	11
12	13	14	15

DICE GAMES

DICE CHOICE



4	5	14	15	24
3	6	13	16	23
2	7	12	17	22
1	8	11	18	21
0	9	10	19	20

DICE GAMES

DICE CHOICE



42	43	44	45	46	47
36	37	38	39	40	41
30	31	32	33	34	35
24	25	26	27	28	29
18	19	20	21	22	23
12	13	14	15	16	17
6	7	8	9	10	11
0	1	2	3	4	5

DICE GAMES

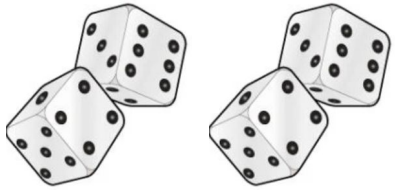
DICE CHOICE



DICE GAMES

Multiplication Collection





Equipment: 2 players 4 dice (2 for each player) 10 counters

How to play: This is a very simple game, relying solely on the luck of the dice roll to determine a winner. However, there is a great deal of maths being undertaken during the play, and in our experience, children love the simplicity of it. No board, just dice, counters, quick calculations... and, ultimately, a winner! How to play: All 10 counters are placed in a single pile between the players. Now, both players take it in turn to roll their two dice. Each player must multiply the two dice numbers together and announce the result. The player with the larger product takes a counter. If both players have the same product then neither can take a counter. When all of the counters have been used each player counts the counters they have collected. The winner is the one with the most counters.

DICE GAMES

NUMBER GRID





Equipment: 2 players one dice (1-6 spots) a copy of the grid, below a calculator

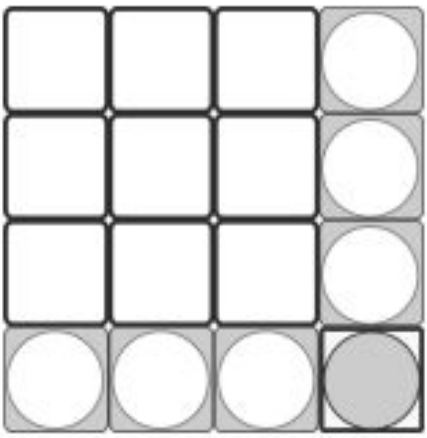
How to play: Each player rolls the dice nine times and writes the number in one of the light grey squares below. Now, take it in turns to multiply the numbers across each row and write the final product in the white circle in the last column. Next, multiply each of the three numbers in the columns and place the product in the bottom circle of each column. Multiply the numbers in the three vertical circles and write this in the bottom grey circle. As a final check, multiply the three numbers in the bottom white circles - what do you notice?

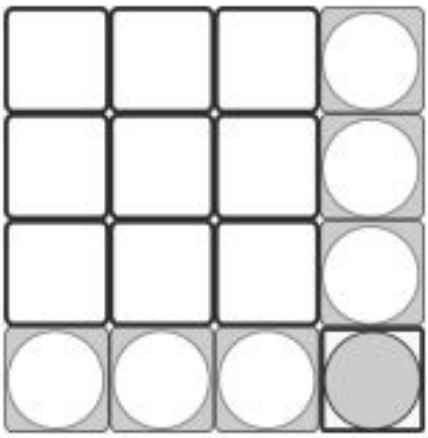
The winner is the player with the largest number in the final circle. If you did not win, you have one more chance. .. Can you rearrange your nine starting numbers to give you a bigger final product? What is the largest product you can create?

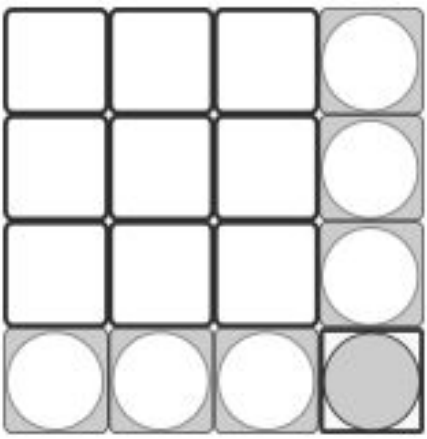
DICE GAMES

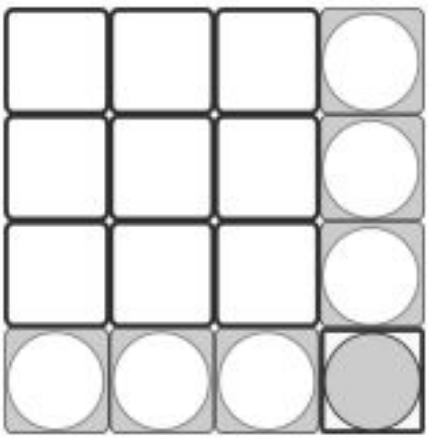
NUMBER GRID











DICE GAMES

Remainder Grid



Equipment: 2 players one dice (1-6 spots) a copy of the playing board counters for each player

How to play: The players take it in turns to choose any number between 20 and 60. They then roll the dice and mentally divide the number they have chosen by the number on the dice. They may then cover up the remainder on the game board. For example, Billy chooses the number 45, rolls a 4 and makes the division ("4 goes into 45 eleven times with one left over"), he may now cover any '1' on the game board with one of his counters. Play passes to the next player, who chooses another number and rolls the dice. The winner is the first player to cover up a 'Winning Combination' of 4 numbers (in any direction) on the game board.

DICE GAMES

Remainder Grid



1	2	5	0	1
4	3	0	1	5
0	2	4	1	3
3	1	5	2	0
2	0	3	1	5

Winning combinations



DICE GAMES

Remainder Grid



2	0	1	3	5
5	1	0	2	4
0	2	3	4	1
4	5	1	0	3
1	3	2	2	1

Winning combinations



DICE GAMES

Remainder Grid



3	1	5	0	4
2	1	2	5	3
1	3	2	0	4
2	1	0	3	1
0	4	3	1	0

Winning combinations



DICE GAMES

Remainder Grid



Winning combinations

