






- you need:**
- counters in two colours
 - two 1–6 dice

Mice for 2 players

1		2	3	4
	5	6	7	8
9	10	11		12
15	16		18	20
24	25	30	36	



How to play

When it's your turn

Roll both dice and say the numbers. You can choose to:

- **add** those numbers
- or **multiply** them
- or find the **difference** between them.

Decide which to do, say the answer, and put a counter on that number.

The end of the game

When somebody gets three of their counters in a line, they win.

Rules

- If you can't put your counter anywhere, roll the dice again
- If you get a double, you may put your counter on any of the mouse pictures

Sample game






Samira rolled 4 and 6.

She could add those numbers $4 + 6 = 10$

or multiply them $4 \times 6 = 24$

or find their difference $6 - 4 = 2$

She chose to multiply them and put her counter on 24.

○		●	3	4
	5	6	7	○
●	10	●		12
15	●		18	○
●	25	○	36	

That meant she won the game.

Multiplication puzzle

Harry arranged the numbers 1, 2, 3 and 4 in four empty boxes.

1	3
4	2

Then he found the products* of both rows and of both columns.

1	3	→ 3
4	2	→ 8
↓ 4	↓ 6	

He did the same here, with the numbers 1, 3, 5 and 8. But he has rubbed out the numbers in the boxes.

Can you put the numbers back?

		→ 8
		→ 15
↓ 5	↓ 24	

Harry's friend Sameena did the same thing with these boxes. But she wouldn't tell Harry what numbers she had put in the boxes.

Can you work out what they were?

		→ 9
		→ 14
↓ 2	↓ 63	

Then they worked together on a larger puzzle. This time they used six numbers.

Can you work out what the numbers were?

2		→ 10
4		→ 24
3		→ 3
↓ 24	↓ 30	

And here?

		→ 5
		→ 14
		→ 32
↓ 28	↓ 80	

Now make up a puzzle like this for a friend to tackle.

* The product is what you get when you multiply two numbers together. The product of 4 and 2 is 8.

you need:

- 18 see-through counters or paper clips
- small play person

2s and 5s for 2 players

First of all

Put the person on 'Start'.

Put one counter or paper clip on each grey square.

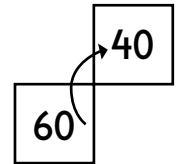
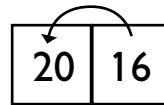
Decide who is the 5s player and who is the 2s player. You may only move the person to a square that is a multiple of your number.

Decide who will start.

When it is your turn

Move the person to a next-door square showing a multiple of your number (up, down or sideways).

This is OK: This is not OK:



If you land on a square with a counter or paper clip, take it.

The end of the game

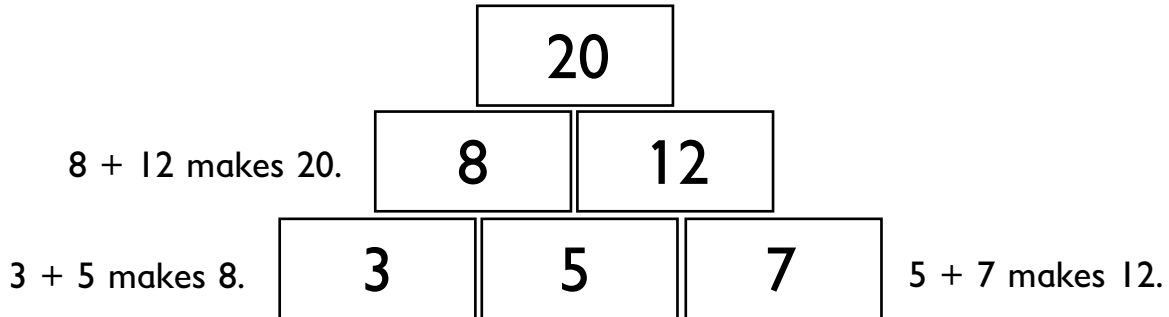
Go on until one player has collected 5 counters. They win.

Start	20	5	4	15	6	25
4	60	8	45	12	10	35
15	20	14	35	20	16	30
25	15	12	80	18	40	32
95	22	30	15	60	48	50
60	40	50	20	10	40	80
18	90	95	80	85	52	100

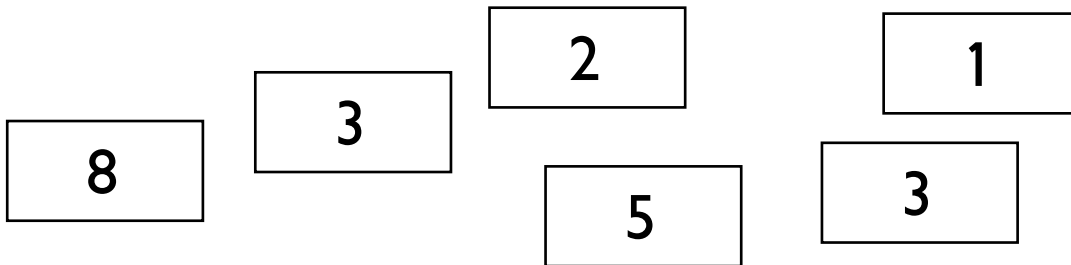
Brick walls

Naomi arranged some number blocks in a row.

Then she added more blocks. Each block is the total of the two blocks it is resting on.

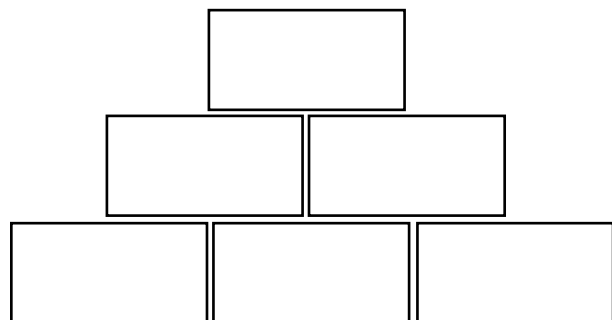


Can you arrange these blocks in the same way?



Write numbers in these blocks to make a wall like Naomi's.

Then write down the numbers on a piece of paper and ask your friend to arrange them to make a wall.



- you need:**
- 2 counters
 - 1-6 dice
 - 20 small cubes or other prizes

Multiples of three for 2 players

First of all

Decide who has the sun and who has the moon.

Put your counters there.

When it's your turn

Roll the dice and say the number.

Move that many steps in either direction.


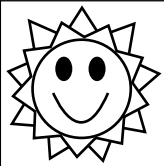
If you land on a multiple of three, you win a prize.

If you land on the sun or the moon you win a prize too.

The rest of the game

Go on until one player has collected 10 prizes.

They win the game.

11	14	9		12	15	19																														
23	<p>Multiples of 3</p> <table style="width: 100%; text-align: center; border-collapse: collapse;"> <tr> <td>1</td><td>2</td><td>③</td><td>4</td><td>5</td><td>⑥</td><td>7</td><td>8</td><td>⑨</td><td>10</td> </tr> <tr> <td>11</td><td>⑫</td><td>13</td><td>14</td><td>⑮</td><td>16</td><td>17</td><td>⑱</td><td>19</td><td>20</td> </tr> <tr> <td>⑳</td><td>22</td><td>23</td><td>⑳</td><td>25</td><td>26</td><td>㉓</td><td>28</td><td>29</td><td>㉖</td> </tr> </table>					1	2	③	4	5	⑥	7	8	⑨	10	11	⑫	13	14	⑮	16	17	⑱	19	20	⑳	22	23	⑳	25	26	㉓	28	29	㉖	2
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10	2	20		14	8	3																														

Three-digit numbers for 2 players

First of all

Decide who is A and who is B. You each have a white box with two sets of digits 0 to 9.

When it is your turn

Choose one of the targets in the grey box.

Both players must use three of their digits to make a number that fits the target and write it in their column in the grey box. Then cross out those digits in your white boxes, as they are now used up.

Agree who got closest to the target. They score one point.

The end of the game

Keep playing until you cannot make any more three-digit numbers.

Who has most points? They win.

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

Target	A	B
largest odd number	<input type="text"/>	<input type="text"/>
largest even number	<input type="text"/>	<input type="text"/>
smallest odd number	<input type="text"/>	<input type="text"/>
smallest even number	<input type="text"/>	<input type="text"/>
largest multiple of 3	<input type="text"/>	<input type="text"/>
smallest multiple of 5	<input type="text"/>	<input type="text"/>
largest number under 500	<input type="text"/>	<input type="text"/>
smallest number over 500	<input type="text"/>	<input type="text"/>

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

you need:

- 0–9 digit cards
- pencil and paper

Difference add

 For 2 players**First of all**

Shuffle the cards and deal 5 to each player.

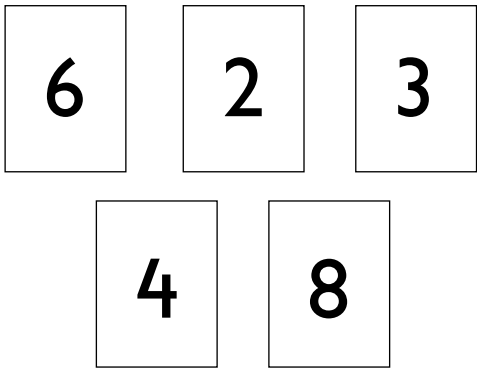
Round 1

Both players, choose 4 of your cards and arrange them to make a pair of two-digit numbers.

Find the difference between your two numbers.

That is your score for the first round.

For example, Karin had these cards.



She chose the 8, 2, 3 and 4 and made 82 and 34.

$$82 - 34 = 48$$

So Karin's score is 48.

The rest of the game

Shuffle the cards again and play another round.

Keep adding on your new scores.

The first player to reach a score of 300 wins the game.

A harder version

Use all 5 cards to make a two-digit number and a three-digit number.

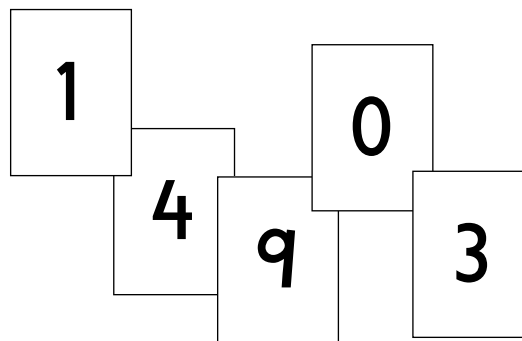
Find the difference and add it to your score.

Aim for a total score of 3000.

For example:

$$934 - 10 = 924$$

You score 924!



you need:

- counters
- 1–6 dice

Nearest to 30

 for 2 players**How to play**

Each person writes their name by one of the circles.

Each person rolls the dice and says what number they get.

Each person multiplies their number by 5 or by 10. (It's OK if you both choose the same.)

Who is closer to 30? That person puts a counter in their circle.

The end of the game

When one person has collected 10 counters, they win.

