Helping Out with Maths in the Evening

Parent booklet

Foundation stage

Made and adapted by MINI

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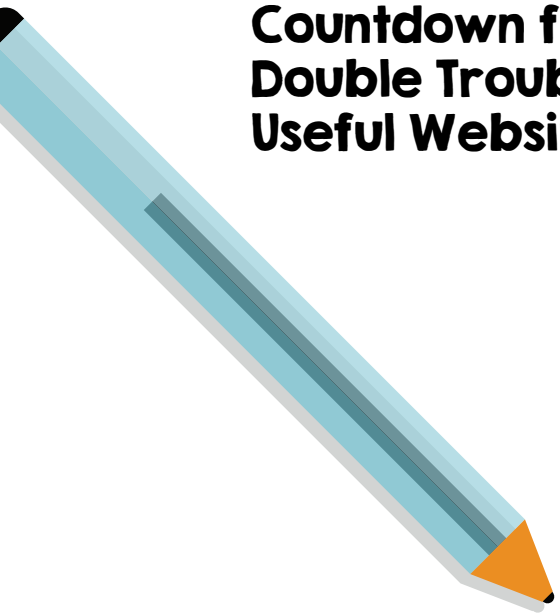
1+1=2

20 x 12 =



Number cards 1-20

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

The Number Washing Line

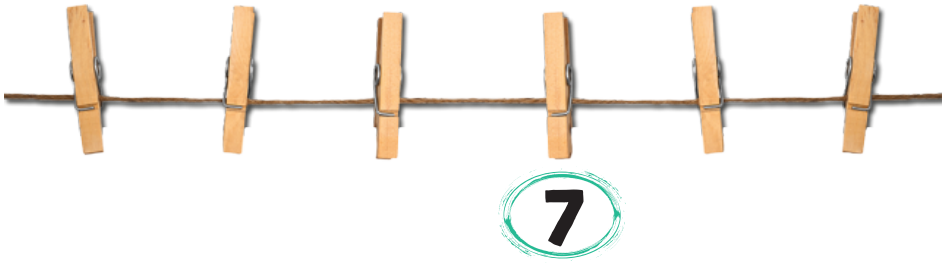
Cut out and Laminate the number cards from Page 3.

Use 20 wooden pegs

Tie a piece of string across the room (eg. between 2 chairs) like a washing line.

Place Number 1 - 20 randomly face down .

Get child to lift card from top of pile and place it on the line where they think it should go eg. 7

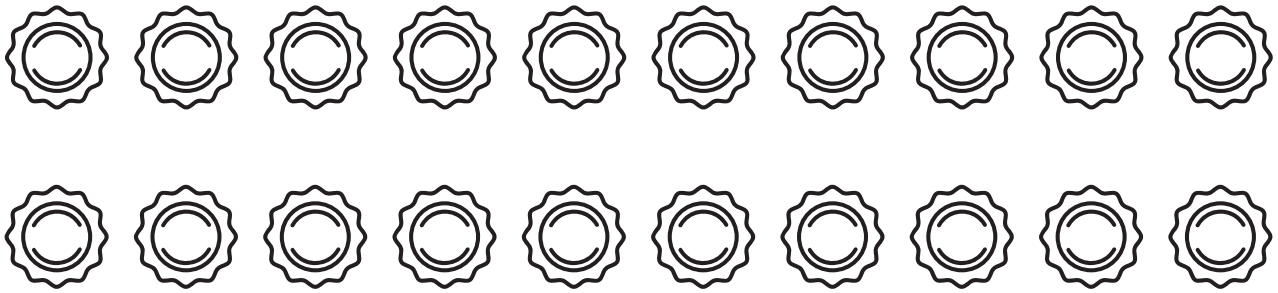


Keep going until all numbers are in correct order.

Try for Numbers 1 - 5, 1 - 10 if not difficult.

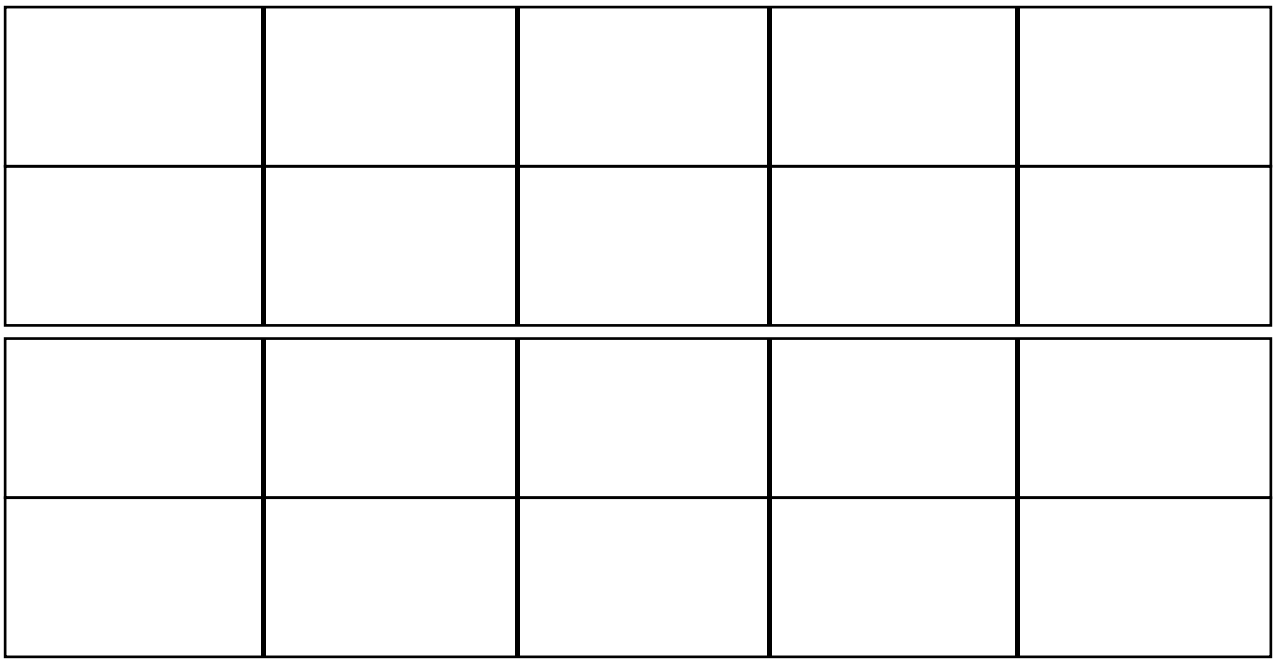
Find the pair

Use 20 milk bottle lids (or other plastic lids)
Get 20 stickers and write the numbers 1-20 (one number per sticker or use a marker to write number.
Stick them to the inside of the plastic lids
Turn over so the numbers are face down
Take turns to turn over 2 lids to find the numbers that add up to 20 (e.g 8 and 12)
If the number 5 on the 2 lids don't add up to 20 the turn passes to the next player.

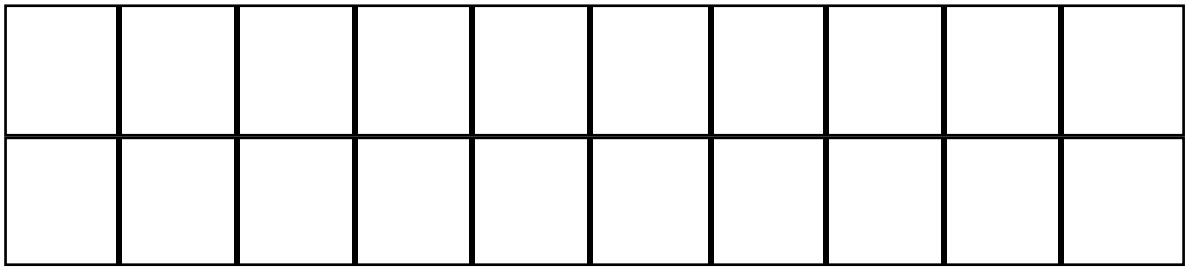


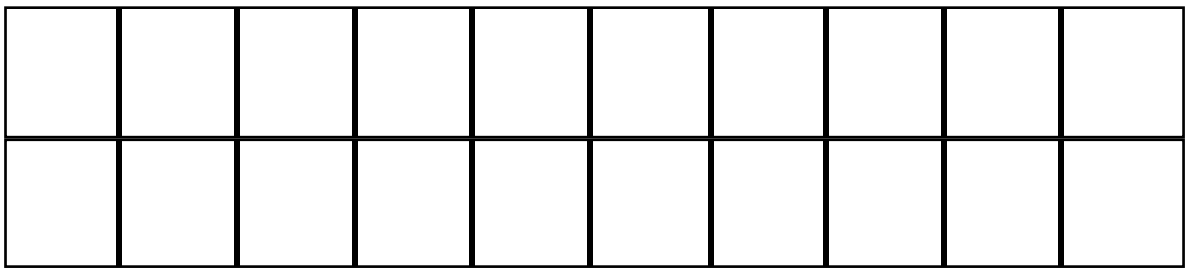
10 & 20 frames

10 frame



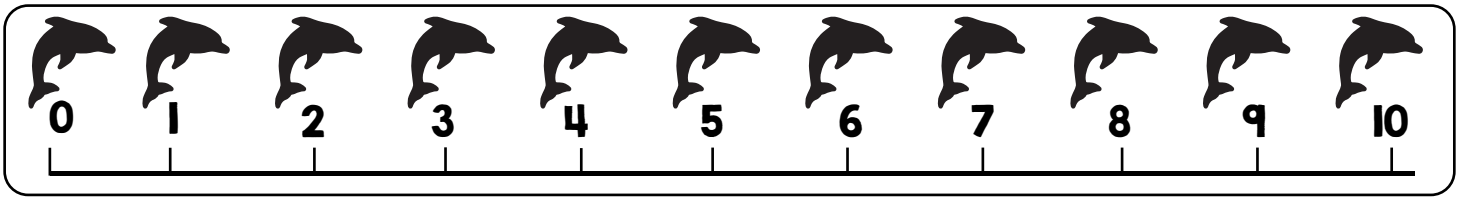
20 frame



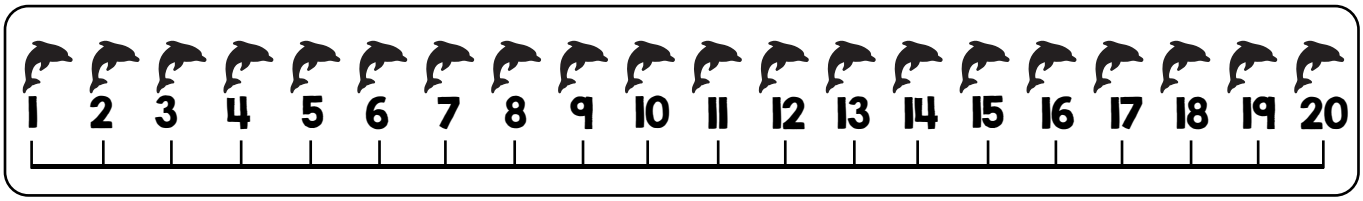


Numberlines

(1-10)



(1-20)



I can write my numbers (1-10)

0 1 2 3 4 5 6 7 8 9 10

0 1 2 3 4 5 6 7 8 9 10

0 1 2 3 4 5 6 7 8 9 10

Hand Cards

Tips

To help your child you can ask similar questions to the following, using cards/hands etc

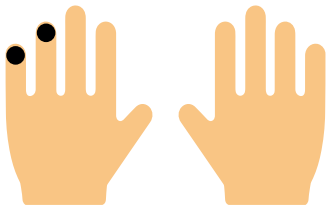
1. Show me 4, 6, 8
2. Show me 4, 6, 8 in a different way
3. Tell your child to close their eyes. You clap a number of times e.g. 3. Get your child to show you number with "hand card".
4. Repeat no. 3 only click your fingers this time.
5. Make chopping movements this time in air.
6. Do dice/dominio patterns in the air for the number e.g. 4 (3,4,5,6)
7. Mix/match the above with your child
8. Clap e.g. 3/2 pattern, 7/3 pattern and ask child to find it

Sample

1 + ☐ =5

Questions:

1. How many dots?
2. How many more to make 5?



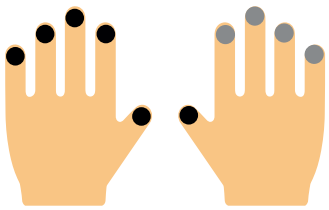
2 + ☐ =10

Questions:

1. How many dots?
2. How many more to make 10?

Questions:

1. How many dots altogether?
2. How many black dots?
3. How many grey dots?



Questions:

1. How many dots altogether?
2. How many black dots?
3. How many grey dots?

Bridging Cards

Tips

What I need: 2 Ten frames

* You can make, draw, use 2 empty egg cartons(2x5) or 10s/20s frames Get your frame laminated.
* 2 sets of coloured counters. Eg Red/black, Yellow/Purple. (Do not use lots of different "odd" coloured counters as it may be confusing for your child.)
* Or Reversible Counters (Red/Yellow-Downloadable from Mathsimprovementni)
*Or 1p coins (Using Heads(H) or Tails (T) for colours)

You can get your child to complete any of the "sums" which bridge over 10 on your frame as follows: eg. 6+5, 6+6...9+8, 9+9

Frame 1

E.g. Move 7 Red Counters (1p coins Heads) onto one of the Ten Frames.

H	H	H	H	H
H	H			

Frame 2

Move 5 Yellow Counters (1p coins Tails) onto the other frame (Frame 2)

T	T	T	T	T

Ask your child to move yellow counters (1p coins Tails) from frame 2 to fill up Frame 1 (Encourage your child to remove counters (coins) from the right hand side/far end/side of the frame).

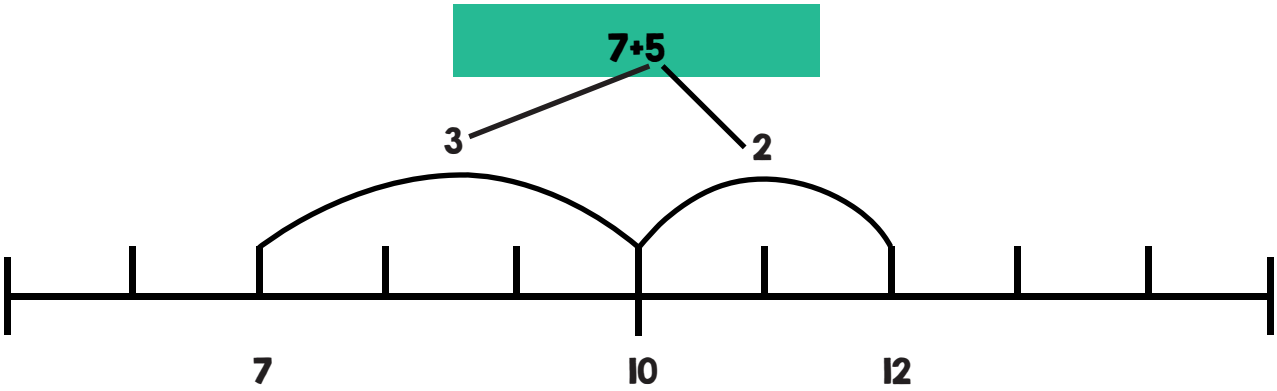
The answer should look like this:

H	H	H	H	H
H	H	T	T	T

T	T			

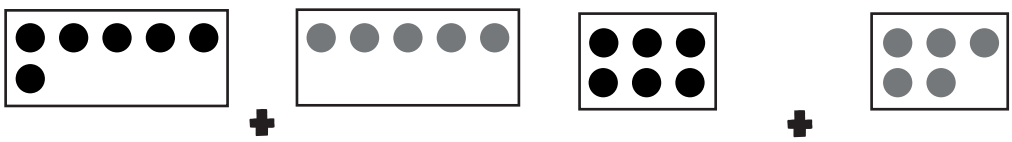
Bridging Cards

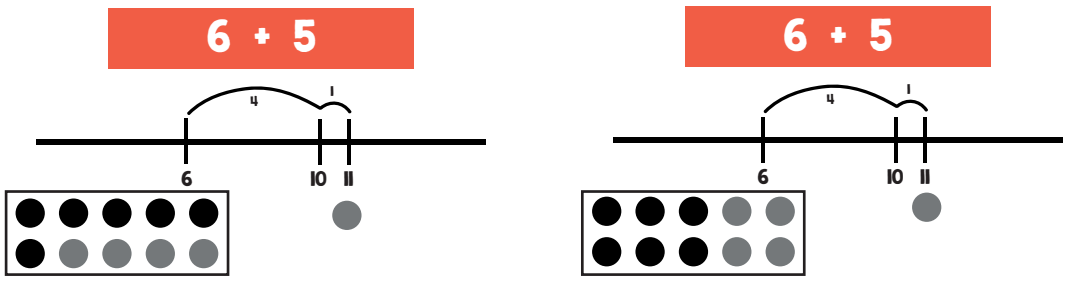
* How many counters (coins) altogether? (Ans=12)
* How many in Frame 1? (Did you need to count? Why not?)
* How many in Frame 2?
* So 7+5=12
* Get your child to do the sum making their own Empty Number Line (ENL) which they can draw on a whiteboard or book as follows:



* There are about 30 different sums to give your child to practise.
* Take your time and give your child "wait" time too!
* Check the answer

Sample



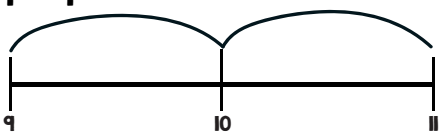


Counting On/Back

Teaching Activities

Note: Pupils may use number lines where and when appropriate

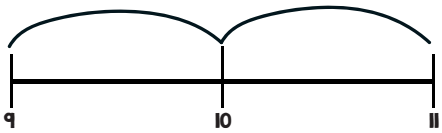
A. Counting on (1's)



Example: 9-11

- Count from 9 to 11, and say it after me. Ready; 9, 10, 11.
- Now count from 12 to 14 and I want you to say it after me. Ready; 12, 13, 14.
- This can be repeated for any 1, 2, or 3 digit number e.g. 69, 70, 71 or 99, 100, 101.
- Count from 9 to 13 and I want you to say it after me. Ready; 9, 10, 11, 12, 13.
- Now, count from 9 to 13 by yourself.
- Similarly 24 to 28, 99 to 103.

B. Counting Back (1's)



Example 9-11

- Count backwards from 11, and say it after me. Ready; 11, 10, 9.
- Count backwards from 14, and say it after me. Ready; 14, 13, 12.
- Count backwards from 8, and I want you to say it after me. Ready; 8, 7, 6.
- The decade 10-20 is particularly difficult, so loads of practice is required. using 3 numbers before progressing to the next step of 5 successive numbers.
- Now, count from 14 back to 9 by yourself.
- Similarly, 18 to 14, 20 to 16, 82 to 78, 103 to 99.

C. Counting Forwards/Backwards (alternately and sequence)

For this section the teacher's words are plain and the pupil's words are in (brackets):

- This time we'll take turns to say the numbers. I will say 15, then you say 16, and we will keep going like that. Ready; 15, (16), 17, (18),...
- Now we'll swop around. You start with 92. Ready; (92), 93, (94), 95,...
- Let's try that going backwards. I'll start off. Ready; 21, (20), 19, (18),...
- This time we'll go backwards again and you can start from 34. Ready; (34), 33, (32),...
- This time I'll say a list of numbers and you tell me what the next number is. Ready; 11, 12, 13, (?); 27, 28, 29, (?)
- Now we'll try that backwards. Ready; 21, 20, 19, (18); 34, 33, 32, (31).
- I'll say a number and you tell me what number comes after it. Ready; 6, (7); 16, (17); 26, (27) etc.
- This time you tell me what number comes before the number I say. Ready; 93, (92); 53, (52); 33, (32); 30, (29); 41, (40) etc.

Give me a Hand

8	5	7	10	6
5	7	6	8	10
6	9	10	5	7
9	6	8	7	5
7	10	5	6	9

Materials: One 0-5 dice, two different coloured markers

1. Player 1 rolls 0-5 dice
2. Add the number rolled to 5 (e.g. 5+3) Use your hands
3. Find the answer
4. Cross off the number with your coloured marker
5. Player 2 repeats steps 1-4
6. First to 3 in a row wins - can be horizontally, vertically or diagonally

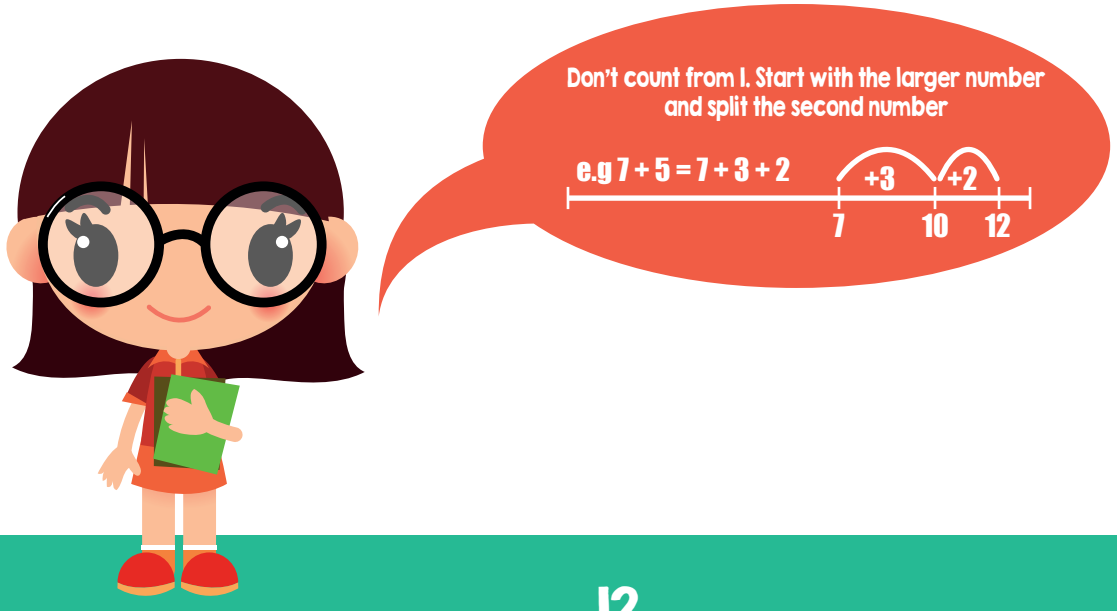
Encourage your child to start from 5, not from 1

Crossing that 10 Bridge

9	12	14	10	13
14	17	13	11	15
12	16	15	13	14
11	14	18	12	8
13	10	12	16	11

Materials: Two 4-9 dice, two different coloured markers

1. Player 1 rolls both of the 4-9 dice
2. Add the values on both dice
3. Mark off the answer on the grid
4. Players 2 repeats steps 1-3
5. The winner is the first to get 4 on a row - diagonally, horizontally or vertically



Clear off to 6

1 2 3 4 5 6

Example:

X					X
X		X	X		X
			X		
	X		X	X	

1 2 3 4 5 6

Materials: One 1-6 dotted dice, 10 counters - 5 of one colour and 5 of another colour, (or you can use 1p/2p/5p coins).

Directions:

1. Each player mark off any 5 squares on the grid with an x.
2. Player 1 rolls the 1 - 6 dice.
3. If you roll a number where one of your counters are placed, remove the counter.
4. If you roll a number you have not selected, or already removed the counter, you miss a turn.
5. Player 2 repeats steps 2 - 4.
6. Winner is the first to remove all their counters from the grid.

Encourage your child not to count the dots individually. The quicker they see the dots all together the better.

Clear off to 10

5	6	7	8	9	10

Example:

X					X
X		X	X		X
			X		
	X		X	X	
5	6	7	8	9	10

Materials: One 0-5 dice, 10 counters - 5 of one colour, 5 of another colour, (or use 1p/2p/5p coins).

Directions:

1. Each player mark off any 5 squares on the grid with an x.
2. Roll the player 1 rolls the 0 - 5 dice.
3. Ask yourself what number you need to add to it to make 10?

e.g. If I roll a 3, I'll remove the counter from 7 on the grid.

4. If the answer is not a number you have selected or have already removed your counter, you miss a turn.
5. Player 2 repeats steps 2 - 4.
6. Winner is the first to remove all their counters from the grid.

Encourage your child to count on from the number rolled, not from 1.

Countdown from 10

8	9	4	5	4	7
7	8	9	8	5	6
9	6	5	6	7	4

A game for two players. You need a dice; plus counters of two different colours. Take turns to roll the dice. Subtract the number from 10. Find the answer on the grid and cover it with one of your counters.
When all numbers are covered, winner is the one who has most counters on the board.

Double Trouble

12	2	6	8	4	10
8	4	12	2	12	6
10	2	6	8	10	4

A game for two players. You need a dice and counters of two different colours. Take turns to roll the dice.
Double the number. Find the answer on the grid and cover it with one of your counters.

When all numbers are covered, winner is the one who has most counters on the board.

Useful Websites/Links

Website Address	Details
http://illuminations.nctm.org/ Best opened with Google Chrome	Go to Interactives Select Pre-K-2 Select Number & Operations Search for Five/Ten Frame Search for Five/Ten Frame
http://www.taw.org.uk/lic/itp/ (Interactive Teaching Programme)	Number facts Difference Number grid
www.primaryresources.co.uk	
www.suffolkmaths.co.uk	(Useful ideas with playing cards)
www.topmarksmaths.co.uk	Whiteboard Resources
www.tbbcbitesizemaths.co.uk	
www.clounagh.org	
www.nrichmaths.org	Go to Primary (Lower) Click on "Strategy Games"

Games

- Jigsaws (number)
- Shopping (counts)
- Hop scotch
- Playing cards
- Money spins (heads/tails)
- Ludo
- Dominoes

Resources

- Counting frames to 20
- Reversible (2 colour) counters
- Dice
- Blank dice

Helping out at Home

Out and About

- Sorting coins
- Playing with 1p, 2p, 5p, 10p, 20p
- Making/ordering lists
- Estimating e.g. how many bags?
- Change from 5p, 10p, 20p

In the Kitchen

- Measures - full/half-full/nearly full/empty
- Maths vocabulary
- Numbers in the kitchen: microwave, TV, radio, clock

Around the house

- Can you put these in order?
- Find Sky Sports 1? Etc.
- Weighing: heavier/lighter - heaviest/lightest
- Fractions - half an apple, Kit Kat, sandwich etc.

Other useful materials , activities and games can be found on www.clounagh.org and Developing Number Knowledge (Sage publications).

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