

Help at Home

Parent Booklet

Maths NI
Improvement



Foundation Stage

Table of Contents

| Description | Page no |
|----------------------------------|---------|
| Targets & Strategies | 03 |
| Number Cards 1-20 | 04 |
| Number Matching Cards (up to 20) | 05 |
| 5 Frames | 06 |
| Dotted Numbers to 10 | 07 |
| 10 & 20 Frames | 08 |
| Numberlines (1-10) | 09 |
| I Can Write My Numbers (1-10) | 10 |
| Hand Cards | 11 |
| Bridging Cards | 12 |
| Counting On/Back | 14 |
| Useful Websites/Links | 15 |

Targets & Strategies

During foundation stage your child may be working on the following:

- Count orally in 1's and 10's forwards/backwards from/to zero within 50
- Count orally in 1's, 2's forwards/backwards from different starting numbers within 20
- Count orally in 10's forward/backwards from a given number within 50
- Recognise, read and write the numbers up to 20, then 50
- Order numbers – know number before, after, between within 20, then 50
- Order set of consecutive and random numbers within 20, then 50
- Work out one more, two more, three more - demonstrate understanding that when adding, answer will be larger
- Work out one less, two less, three less than a number - demonstrate understanding that when subtracting, answer will be smaller
- Add two numbers fewer than ten by counting on e.g. $6+3$ is 6, 7, 8, 9
- Take away one, two or three from a number up to 12
- Know/understand number facts to 5, 10
- Identify missing numbers in a sequence within 20
- Add 1,2,0 to any number, answers within 10, then 20
- Know doubles to $5+5$
- Know $3+2$ and $2+3$ to complete number stories to 5
- Subtract 1,2,0 from any number, answers within 10
- Demonstrate understanding of commutative nature of addition
- From 3 given numbers within 5, give 4 number facts

Number Cards 1-20

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

Number Matching Cards (up to



2



18



4



16



1



19



10



3



17



5



15



6



14



10



7



13



8



12











































9

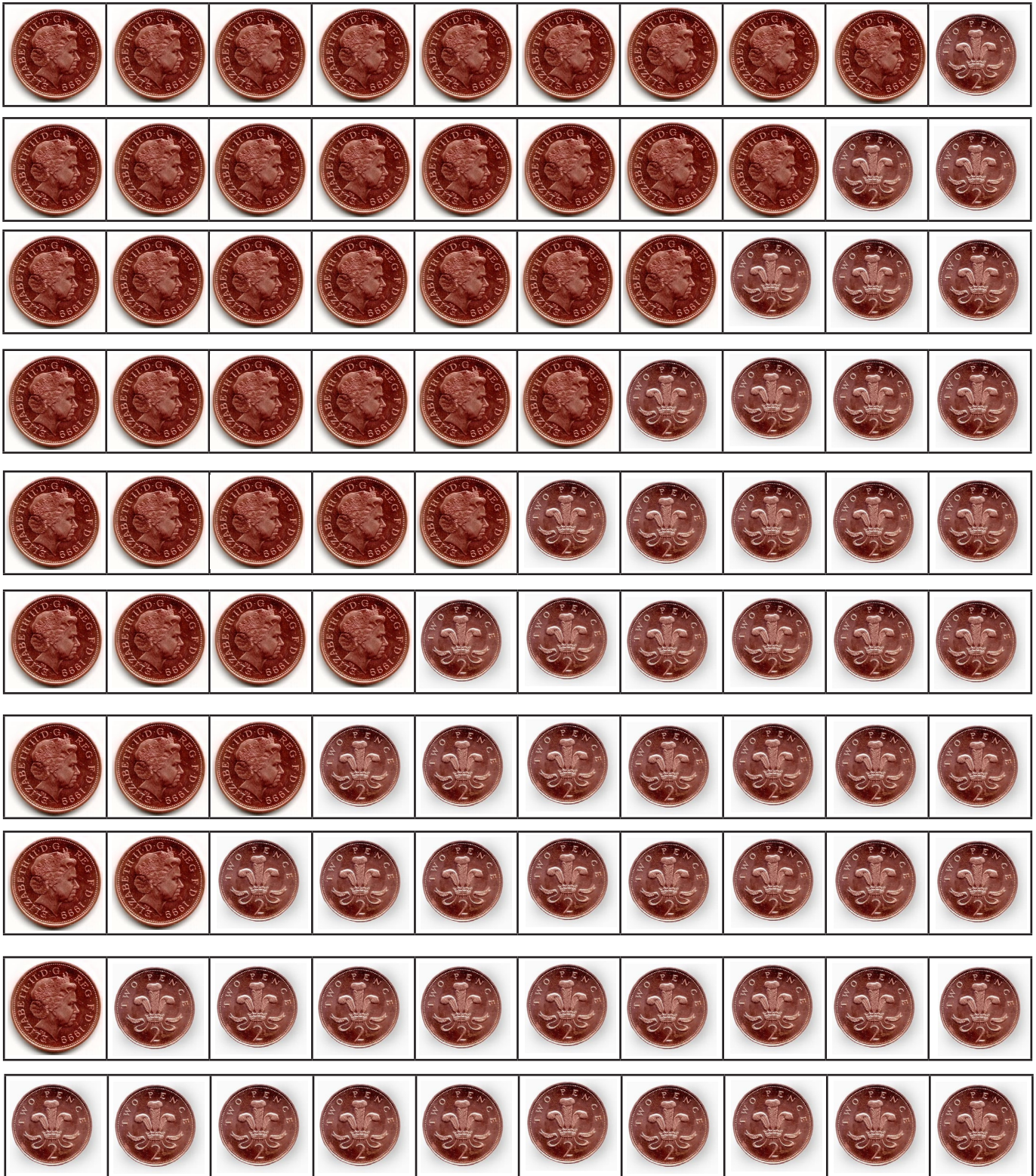


11

5 Frames

| | | | | |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  | | | | |
|  |  | | | |
|  |  |  | | |
|  |  |  |  | |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

Dotted Numbers to 10



10 Frame

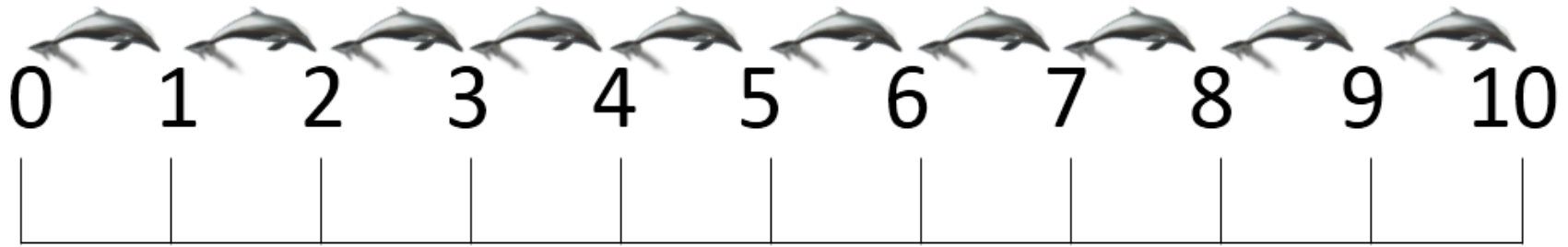
| | | | | |
|--|--|--|--|--|
| | | | | |
| | | | | |
| | | | | |
| | | | | |

20 Frame

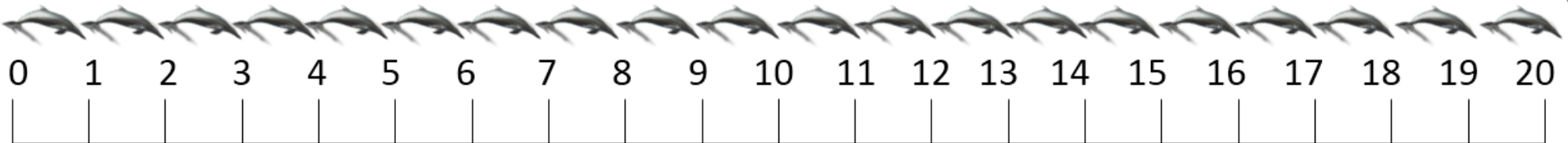
| | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

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/domino 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



$$1 + \square = 5$$

Questions:

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



$$2 + \square = 10$$

Questions:

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



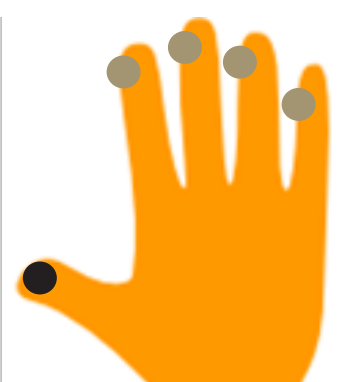
Questions:

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 –
- Or 1p coins(Using Heads(H) or Tails(T) for colours)

You can get your child to complete any of the "sums" on your cards as follows:

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

| | | | | |
|---|---|---|---|---|
| H | H | H | H | H |
| H | H | | | |

Frame 1

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

| | | | | |
|---|---|---|---|---|
| T | T | T | T | T |
| | | | | |

Frame 2

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 :

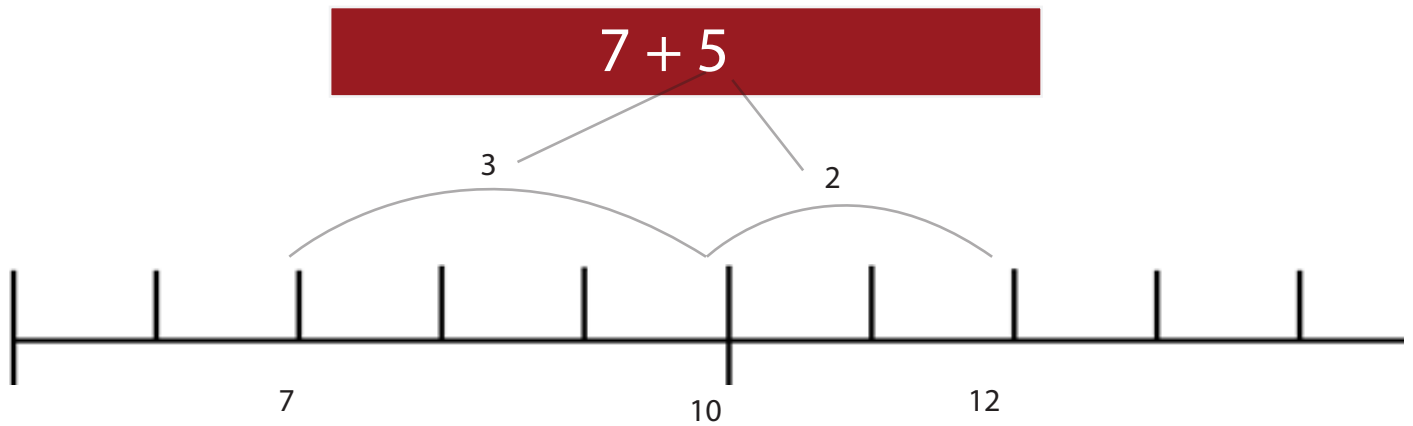
| | | | | |
|---|---|---|---|---|
| H | H | H | H | H |
| H | H | T | T | T |

Bridging Cards

| | | | | |
|---|---|--|--|--|
| T | T | | | |
| | | | | |

- 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 white-board or book as follows :



- You can check the answer and working out on your card.
- On the reverse side of the card the same "sum" can be set out a slightly different way.
- There are about 30 different sums to give your child practice.
- Take your time and give your child "wait" time too!

Sample

6 + 5

11

6 + 5

11

Counting On/Back

Teaching Activities

Note: Pupils may use number lines where and when appropriate

A. Counting on (1's)

Example: 9-11

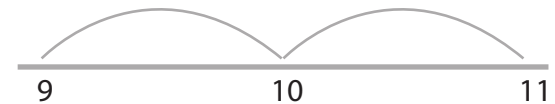
- Count from 9 to 11, and say it after me. Ready; 9,10,11
- Now count from 12 to 14, and I want you say it after me. Ready; 12, 13, 14
- This can be repeated for any 1, 2, or 3 digit number. E.g. 69, 70, 71 or 99, 100, 101
- Count from 9 to 13 and I want you to say it after me. Ready; 9, 10, 11, 12, 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 10-12 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; 68 to 64; 82 to 78; 103 to 99.



C. Counting Forwards/Backwards (alternately and sequence)

For this section the teacher's words are plain and 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.

Useful Websites/Links

| Website Address | Details |
|---------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| http://illuminations.nctm.org (Good for Combining, Partitions, +, -) | Go to Activities Select PreK-2 Look for 5 frame/10 frame/electronic abacus Print off excellent worksheets/number lines and number cards Click on 'Problem Solving' Playing Cards Then click on 'Set 1' Go to Foundation |
| www.primaryresources.co.uk/maths/mathsB1.htm | |
| www.suffolkmaths.co.uk (Useful ideas with playing cards) | |
| www.topmarks.co.uk | |
| www.bbcbitessizemaths.co.uk | |
| www.clounagh.org | |
| www.nrich.maths.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 Fully/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.

