

Maths

Place Value

Week 3

Session 1

Can you count in 2s, 5s and 10s?

Let's count forwards and backwards!

What patterns have you noticed?

Recap- Draw rods and crosses for the following numbers

34

21

18

Recap- Which numbers are being represented?

||||| xxxxx

|x

||| xx

Look at the following 100 square. What do you notice?

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

This is a number square with missing numbers, how could we start to fill it out?

| | | | | | | | | | |
|----|----|----|----|----|----|----|----|----|-----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 11 | 12 | | 14 | | 16 | 17 | | 19 | 20 |
| | 22 | | 24 | 25 | | | 28 | | 30 |
| 31 | 32 | | | 35 | 36 | 37 | | 39 | 40 |
| 41 | 42 | | | | | | | 49 | 50 |
| 51 | 52 | | 54 | 55 | | 57 | 58 | 59 | 60 |
| 61 | 62 | | | 65 | 66 | | | 69 | 70 |
| | 72 | | 74 | | 76 | 77 | 78 | 79 | 80 |
| | 82 | | 84 | 85 | 86 | | | 89 | 90 |
| | 92 | 93 | 94 | 95 | 96 | | 98 | | 100 |

Look at the number above and below. What number is missing?

What two numbers are either side?

What other numbers can be filled in?

Task-

Fill in the missing numbers on your number squares.

Challenge

Use two different colours to colour in the odd and even numbers.

Write in the missing numbers up to 100.

| | | | | | | | | | |
|----|----|----|----|----|----|----|----|----|-----|
| 1 | 2 | 3 | | 5 | 6 | 7 | 8 | 9 | 10 |
| 11 | 12 | | 14 | | 16 | 17 | | 19 | 20 |
| | 22 | | 24 | 25 | | | 28 | | 30 |
| 31 | 32 | | | 35 | 36 | 37 | | 39 | 40 |
| 41 | 42 | | | | | | | 49 | 50 |
| 51 | 52 | | 54 | 55 | | 57 | 58 | 59 | 60 |
| 61 | 62 | | | 65 | 66 | | | 69 | |
| | 72 | | 74 | | 76 | 77 | 78 | 79 | 80 |
| | 82 | | 84 | 85 | 86 | | | 89 | 90 |
| | 92 | 93 | 94 | 95 | 96 | | 98 | | 100 |

Session 2

Which numbers are even? Which numbers are odd?

23

45

30

18

16

56

12

99

5

20

87

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

Recap: What
are the
missing
numbers?

Tell me **how**
you know.

| | | | | | | | | | |
|----|----|----|----|----|----|----|----|----|-----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 11 | 12 | | 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 | | 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 | | 86 | 87 | 88 | 89 | 90 |
| 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 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 |

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

Use the 100 square to help you work out the miss numbers.



| | | |
|----|----|---|
| 44 | 45 | ? |
| ? | 55 | ? |

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

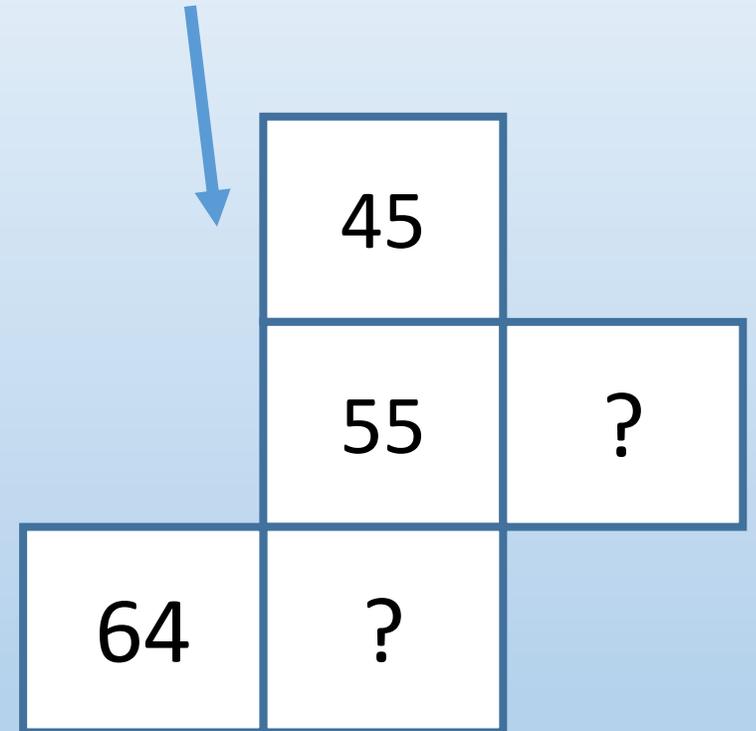
Use the 100 square to help you work out the miss numbers.



| | | |
|----|----|----|
| 12 | ? | 14 |
| 22 | 23 | ? |

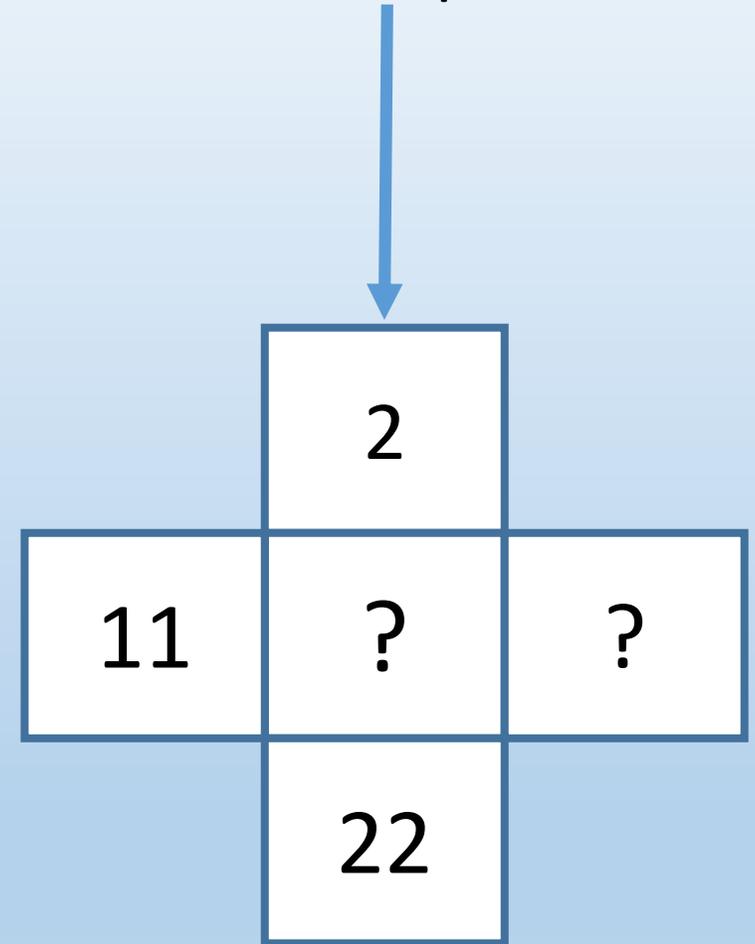
| | | | | | | | | | |
|----|----|----|----|----|----|----|----|----|-----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| 41 | 42 | 43 | 44 | 45 |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

Now try the following example



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

Now try the following example



Challenge

I Think of a Number...



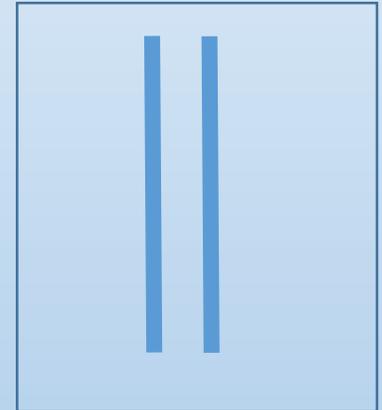
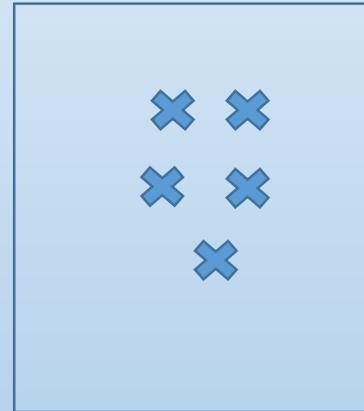
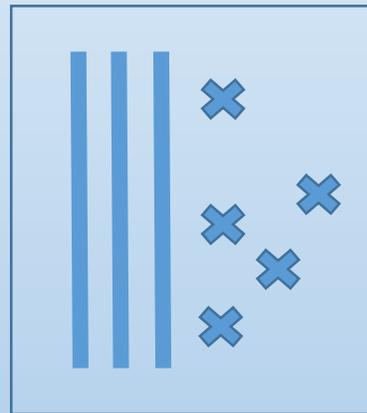
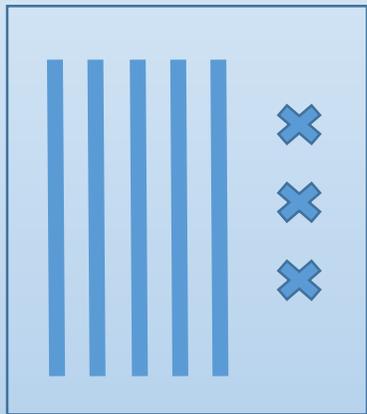
Terg the alien thinks of a number. She says:

- My number is even
- It has two digits
- It is greater than 35 but less than 50

What could her number be? How do you know? Show me!

Session 3

What number does this represent?



What are the following numbers? Can you spell them?

1

3

6

7

10

One

Three

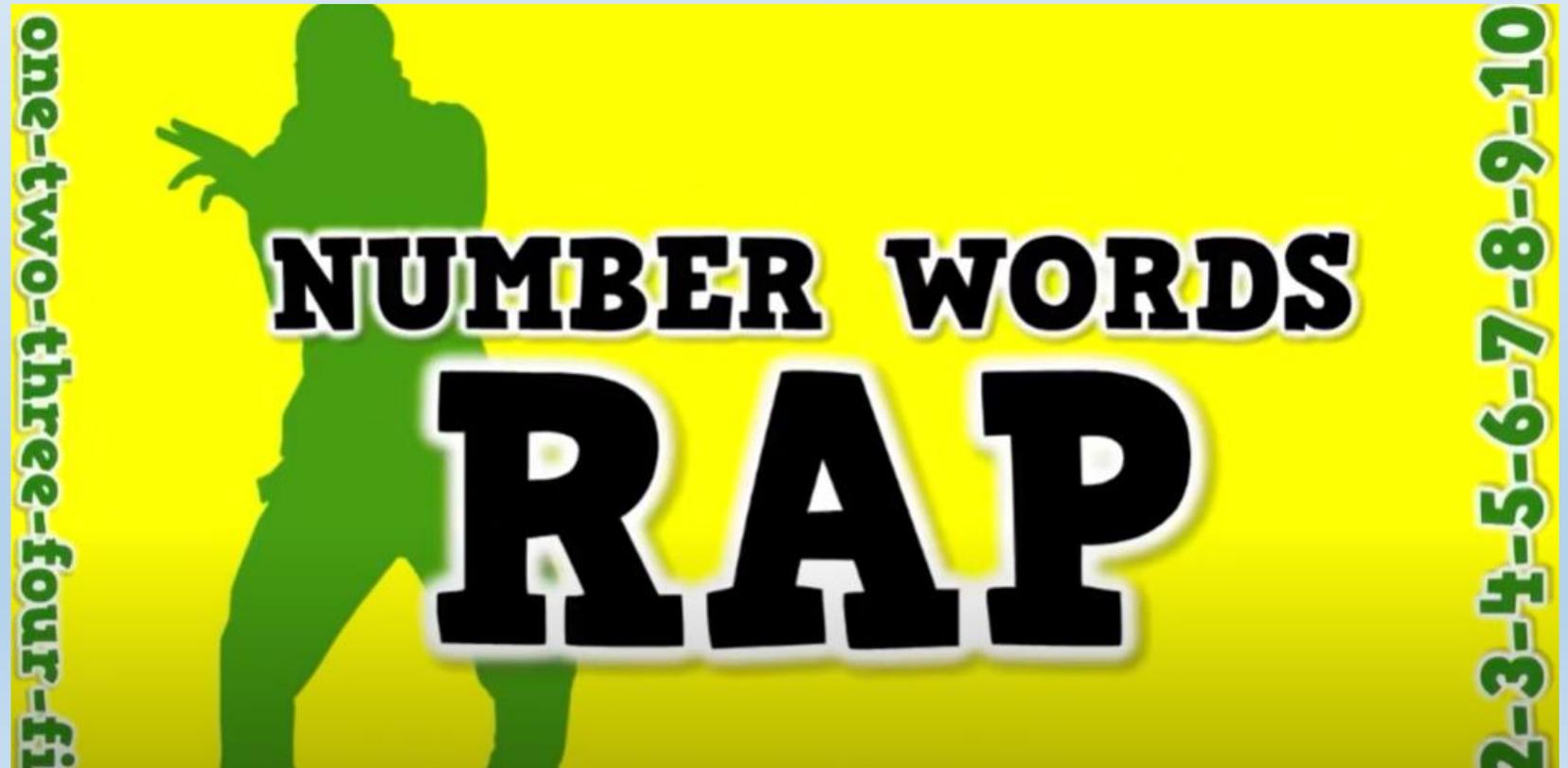
Six

Seven

Ten

Watch the following video to help you with spelling numbers to 10!

<https://youtu.be/SzfFzJGwwZQ>



Match the numbers to the words- What do you notice?

14

Sixteen

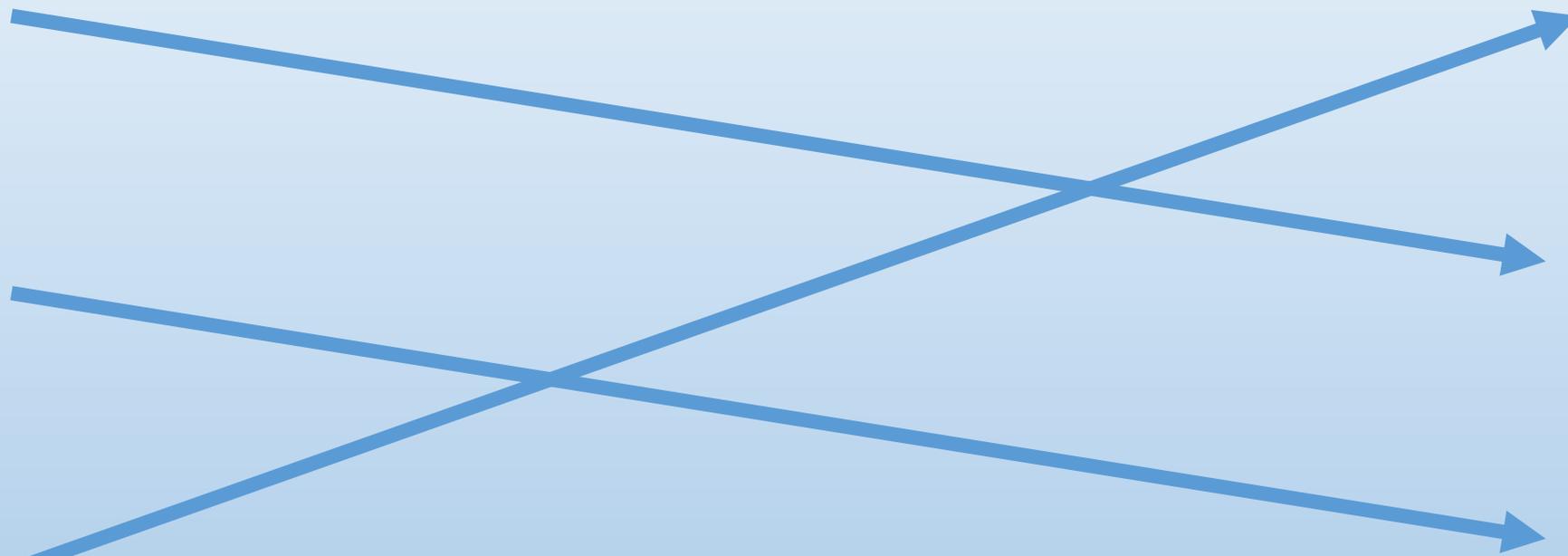
18

Fourteen

16

Eighteen

Apart from 11 (eleven) and 12 (twelve). Each of the numbers from 13-19 start with the same spelling as 1-10.



Match the numbers to the words- What do you notice?

14

Sixteen

18

Fourteen

16

Eighteen

Apart from 11 (eleven) and 12 (twelve). Each of the numbers from 13-19 start with the same spelling as 1-10.

If you can spell the '10s' numbers and number 1-12 then you can spell all the numbers to 100!

| digit | In words |
|-------|----------|
| 10 | Ten |
| 20 | Twenty |
| 30 | Thirty |
| 40 | Fourty |
| 50 | Fifty |
| 60 | Sixty |
| 70 | Seventy |
| 80 | Eighty |
| 90 | Ninety |

| | |
|----|-------|
| 1 | one |
| 2 | two |
| 3 | three |
| 4 | four |
| 5 | five |
| 6 | six |
| 7 | seven |
| 8 | eight |
| 9 | nine |
| 10 | ten |

Today we are going to focus on numbers 1-20

Remind your partner what you notice about the numbers 14,15,16,17,18 and 19.

| Number Words | | | |
|--------------|-------|----|-----------|
| 1 | one | 11 | eleven |
| 2 | two | 12 | twelve |
| 3 | three | 13 | thirteen |
| 4 | four | 14 | fourteen |
| 5 | five | 15 | fifteen |
| 6 | six | 16 | sixteen |
| 7 | seven | 17 | seventeen |
| 8 | eight | 18 | eighteen |
| 9 | nine | 19 | nineteen |
| 10 | ten | 20 | twenty |

Today we are going to focus on numbers 1-20

Numbers 13-19 all end in teen

t e e n
• — •

| Number Words | | | |
|--------------|-------|----|-----------|
| 1 | one | 11 | eleven |
| 2 | two | 12 | twelve |
| 3 | three | 13 | thirteen |
| 4 | four | 14 | fourteen |
| 5 | five | 15 | fifteen |
| 6 | six | 16 | sixteen |
| 7 | seven | 17 | seventeen |
| 8 | eight | 18 | eighteen |
| 9 | nine | 19 | nineteen |
| 10 | ten | 20 | twenty |

Task

In groups, match the numbers to their correct word.

When you are finished, can you play snap with them?



| Number Words | | | |
|--------------|-------|----|-----------|
| 1 | one | 11 | eleven |
| 2 | two | 12 | twelve |
| 3 | three | 13 | thirteen |
| 4 | four | 14 | fourteen |
| 5 | five | 15 | fifteen |
| 6 | six | 16 | sixteen |
| 7 | seven | 17 | seventeen |
| 8 | eight | 18 | eighteen |
| 9 | nine | 19 | nineteen |
| 10 | ten | 20 | twenty |

Session 4

On a whiteboard can you tell me the missing numbers?

$$2 + \underline{\quad} = 10$$

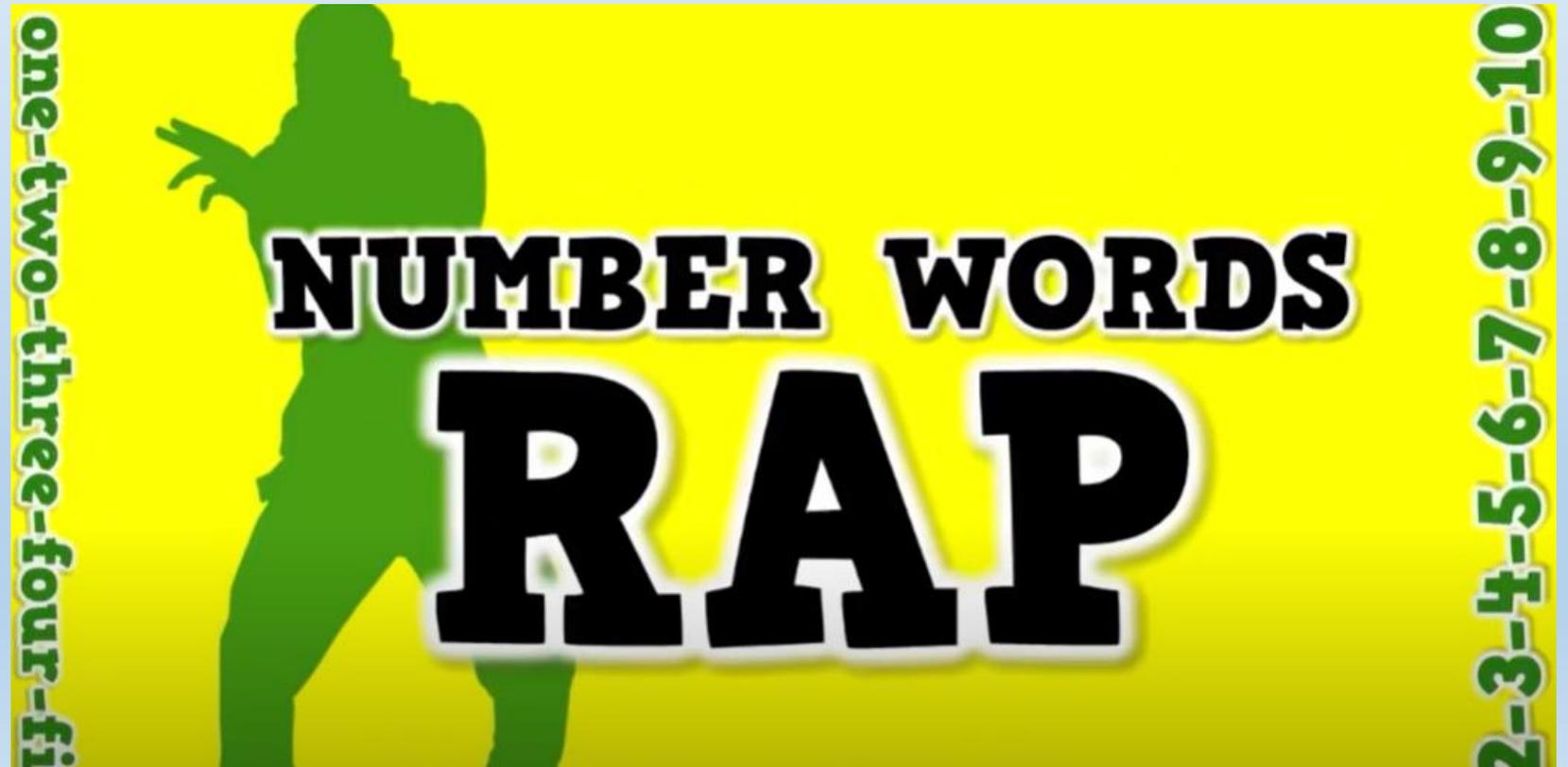
$$6 + \underline{\quad} = 10$$

$$1 + \underline{\quad} = 10$$

Recap

Watch the following video to help you with spelling numbers to 10!

<https://youtu.be/SzfFzJGwwZQ>



If you can spell the '10s' numbers and number 1-12 then you can spell all the numbers to 100!

| digit | In words |
|-------|----------|
| 10 | Ten |
| 20 | Twenty |
| 30 | Thirty |
| 40 | Fourty |
| 50 | Fifty |
| 60 | Sixty |
| 70 | Seventy |
| 80 | Eighty |
| 90 | Ninety |

| | |
|----|-------|
| 1 | one |
| 2 | two |
| 3 | three |
| 4 | four |
| 5 | five |
| 6 | six |
| 7 | seven |
| 8 | eight |
| 9 | nine |
| 10 | ten |

Lets look at some examples

52

Fifty Two

| digit | In words |
|-------|----------|
| 10 | Ten |
| 20 | Twenty |
| 30 | Thirty |
| 40 | Fourty |
| 50 | Fifty |
| 60 | Sixty |
| 70 | Seventy |
| 80 | Eighty |
| 90 | Ninety |

| | |
|----|-------|
| 1 | one |
| 2 | two |
| 3 | three |
| 4 | four |
| 5 | five |
| 6 | six |
| 7 | seven |
| 8 | eight |
| 9 | nine |
| 10 | ten |

Lets look at some examples

71

SeventyOne

| digit | In words |
|-------|----------|
| 10 | Ten |
| 20 | Twenty |
| 30 | Thirty |
| 40 | Fourty |
| 50 | Fifty |
| 60 | Sixty |
| 70 | Seventy |
| 80 | Eighty |
| 90 | Ninety |

| | |
|----|-------|
| 1 | one |
| 2 | two |
| 3 | three |
| 4 | four |
| 5 | five |
| 6 | six |
| 7 | seven |
| 8 | eight |
| 9 | nine |
| 10 | ten |

Lets look at some examples

26

Twenty Six

| digit | In words |
|-------|----------|
| 10 | Ten |
| 20 | Twenty |
| 30 | Thirty |
| 40 | Fourty |
| 50 | Fifty |
| 60 | Sixty |
| 70 | Seventy |
| 80 | Eighty |
| 90 | Ninety |

| | |
|----|-------|
| 1 | one |
| 2 | two |
| 3 | three |
| 4 | four |
| 5 | five |
| 6 | six |
| 7 | seven |
| 8 | eight |
| 9 | nine |
| 10 | ten |

Match the numbers to the words- What do you notice?

24

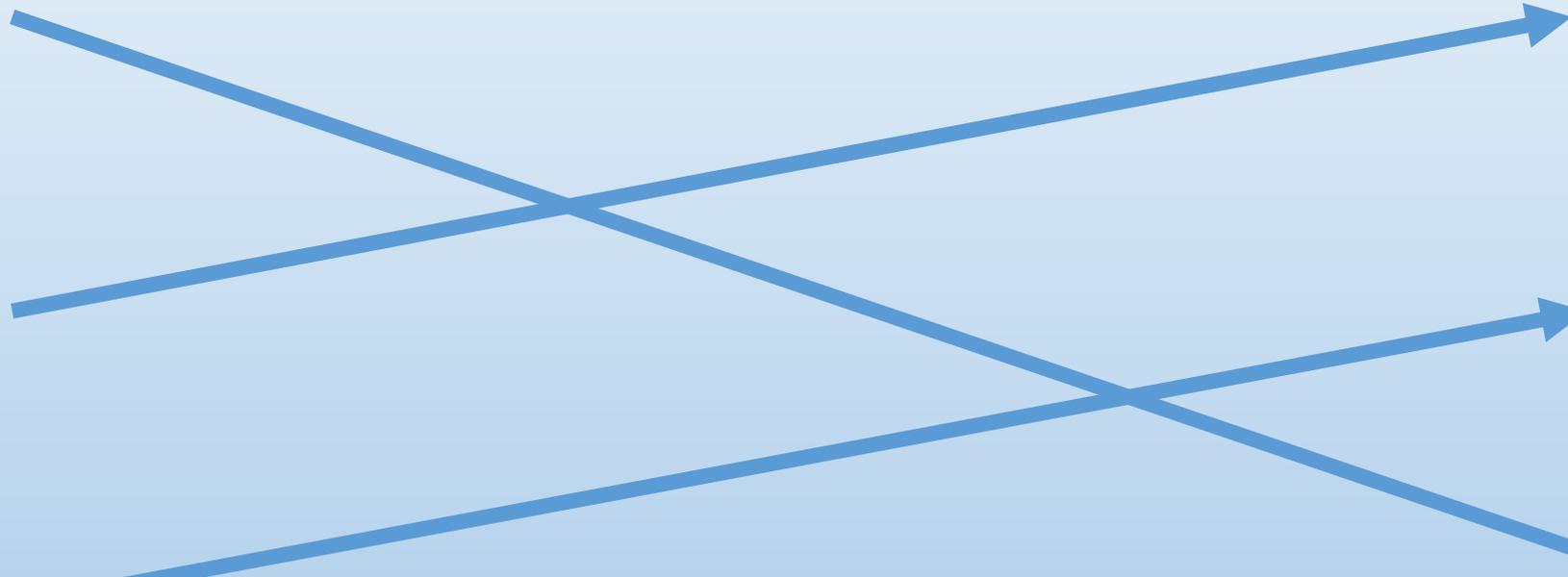
88

76

Eighty-eight

Seventy-Six

Twenty-Four



On whiteboards, can you write the following numbers?

43 Forty Three

21 Twenty One

66 Sixty Six

| digit | In words |
|-------|----------|
| 10 | Ten |
| 20 | Twenty |
| 30 | Thirty |
| 40 | Fourty |
| 50 | Fifty |
| 60 | Sixty |
| 70 | Seventy |
| 80 | Eighty |
| 90 | Ninety |



| | |
|----|-------|
| 1 | one |
| 2 | two |
| 3 | three |
| 4 | four |
| 5 | five |
| 6 | six |
| 7 | seven |
| 8 | eight |
| 9 | nine |
| 10 | ten |

Task

Fill in the table either adding the correct number or word so that they match. Use the following spellings to help you.

| Number Words | | | |
|---------------------|-------|----|-----------|
| 1 | one | 11 | eleven |
| 2 | two | 12 | twelve |
| 3 | three | 13 | thirteen |
| 4 | four | 14 | fourteen |
| 5 | five | 15 | fifteen |
| 6 | six | 16 | sixteen |
| 7 | seven | 17 | seventeen |
| 8 | eight | 18 | eighteen |
| 9 | nine | 19 | nineteen |
| 10 | ten | 20 | twenty |

| digit | In words |
|--------------|-----------------|
| 10 | Ten |
| 20 | Twenty |
| 30 | Thirty |
| 40 | Fourty |
| 50 | Fifty |
| 60 | Sixty |
| 70 | Seventy |
| 80 | Eighty |
| 90 | Ninety |

Challenge

- Using these cards, how many different two-digit numbers can you make with a total higher than 50?
- How do you know that you have found them all?



60 62, 64, 66, 68, 80, 82, 84, 86, 88

Hide
Answers

Session 4

Look at the following questions and explain your reasoning for them.

Write your answers on a whiteboard.

1

Count and write the number of cars in the car park.

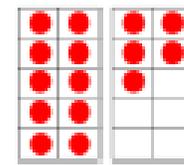
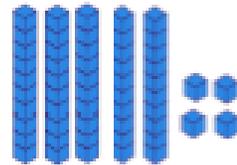
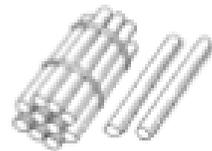


There are cars in the car park.

2

What numbers are represented below?

Write your answer in numerals and words.



3

Match the numerals to the words.

17

48

38

70

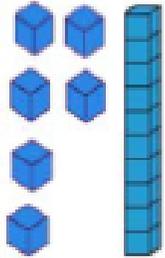
Thirty eight

Seventy

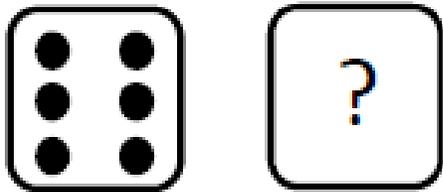
Forty eight

Seventeen

Tom says he has 61
Is he correct?
Explain your reasoning



Freddy rolls two dice.
One dice shows a 6.
What could his total be?
Write your answers in words.



How many dots of one die?
How did you count the dots?
How many dots on a nine sided die?

Each bag contains 10 cookies.



How many cookies are there altogether?

Write your answers in numerals and words.

What strategy did you use?

Did your partner use a different method?

What is the best strategy to use