

Thursday 3rd October
Kate Webster

Year 1 and Year 2 parents Maths Learning
Workshop: Number sense, Addition and Subtraction

You need:

- a copy of the presentation
- a pen or pencil
- evaluation form

Aims:

- To discuss what we mean by number sense and ideas for helping at home
- To practise some written and visual methods for addition and subtraction
- To use some of the key mathematical terminology

Timestable progression

Year 1: **2x, 5x** and **10x tables**

Year 2: **3x, 6x** and **4x tables**

Year 3: **8x, 7x** and **9x tables**

Year 4: **11x, 12x** and **revision**

Knowing the times tables = recalling each fact in any order, including the related division

A diagram illustrating the relationship between multiplication and division facts. It features three equations arranged in a triangle, connected by double-headed arrows. The equations are: $4 \times 5 = 20$ on the left, $20 \div 5 = 4$ on the top right, and $20 \div 4 = 5$ on the bottom right. The arrows indicate that knowing one fact allows you to recall the others.

$$\begin{array}{lcl} & \longleftrightarrow & 20 \div 5 = 4 \\ 4 \times 5 = 20 & & \\ & \longleftrightarrow & 20 \div 4 = 5 \end{array}$$

How you can help at home

Useful websites:



<https://mathsframe.co.uk/en/resources/resource/477/Multiplication-Tables-Check>

Timed tests



<https://www.timestables.co.uk/>

A range of tests for all the times tables



<https://www.timestables.co.uk/>

Multiplication grids - tested against a timer

Your child also has their own log in for 'Purple Mash' which has lots of really fun games.

Number sense

Number bonds

$$0 + 5 = 5$$

$$1 + 4 = 5$$

$$2 + 3 = 5$$

$$3 + 2 = 5$$

$$4 + 1 = 5$$

$$5 + 0 = 5$$

$$0 + 10 = 10$$

$$1 + 9 = 10$$

$$2 + 8 = 10$$

$$3 + 7 = 10$$

$$4 + 6 = 10$$

$$5 + 5 = 10$$

$$6 + 4 = 10$$

$$7 + 3 = 10$$

$$8 + 2 = 10$$

$$9 + 1 = 10$$

$$10 + 0 = 10$$

Number sense

Number bonds can found for any number

$$\begin{array}{l} 0 + 6 = 6 \\ 1 + 5 = 6 \\ 2 + 4 = 6 \\ 3 + 3 = 6 \\ 4 + 2 = 6 \\ 5 + 1 = 6 \\ 6 + 0 = 6 \end{array}$$



Play number bond tennis *(let's try now)*

Number sense

Counting on from any number



Use a 100 square to help

(can be part of it)

Start at any number.

Count in 1s, 2s and 5s.

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

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

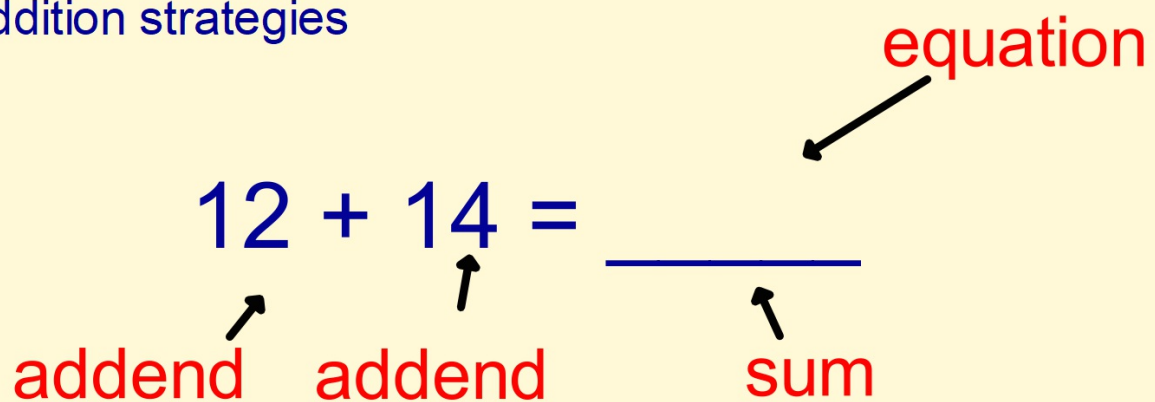
Print off from online

Addition strategies

$$12 + 14 = \underline{\quad}$$

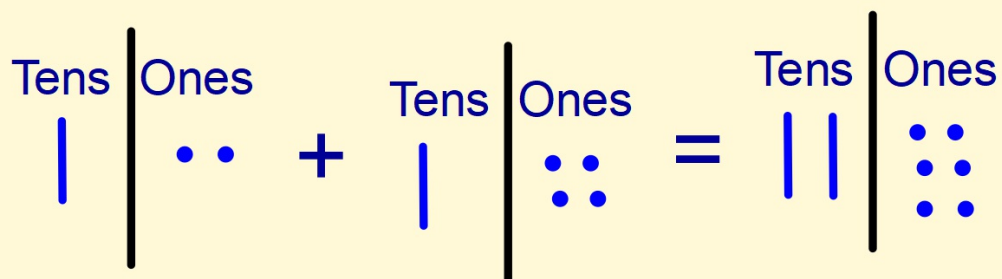
addend addend sum

equation



Using place value knowledge
(Can use real objects or drawings)

Tens	Ones		Tens	Ones		Tens	Ones
	••	+		••	=		••

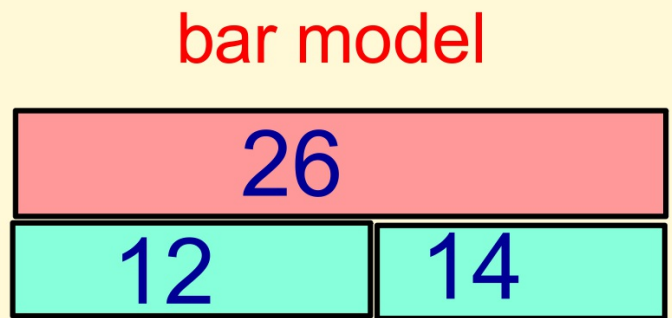
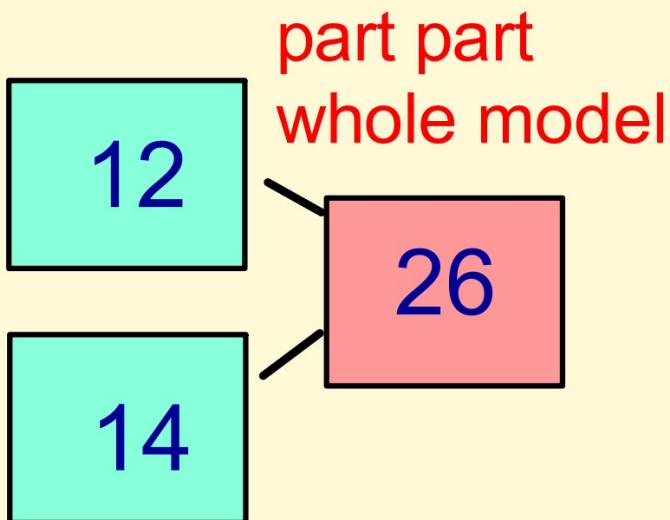


Addition equations and visual representations

equation

$$12 + 14 = 26$$

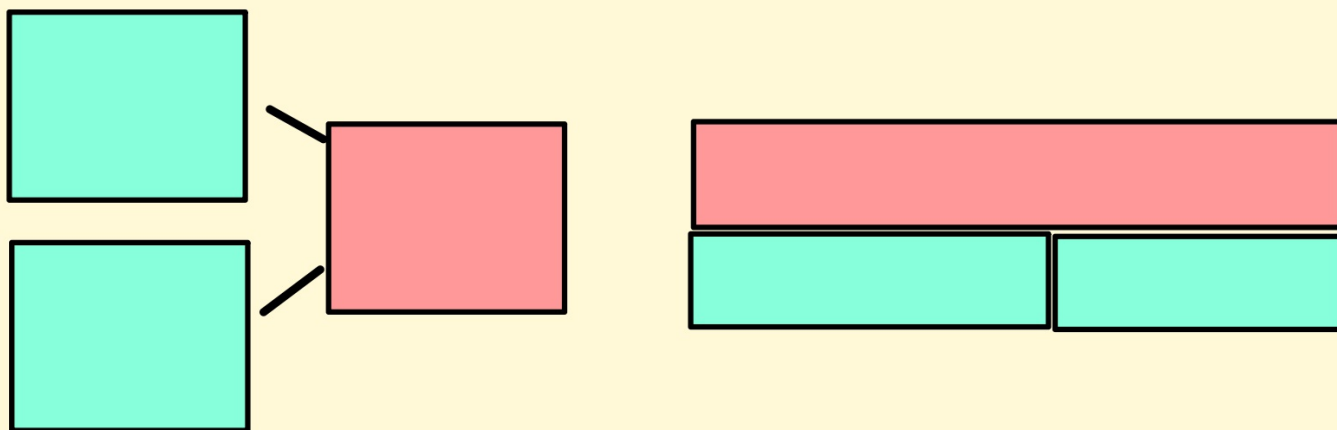
addend addend sum



Your turn!

$$22 + 24 = \underline{\hspace{2cm}}$$

Tens	Ones		Tens	Ones		Tens	Ones
		+			=		

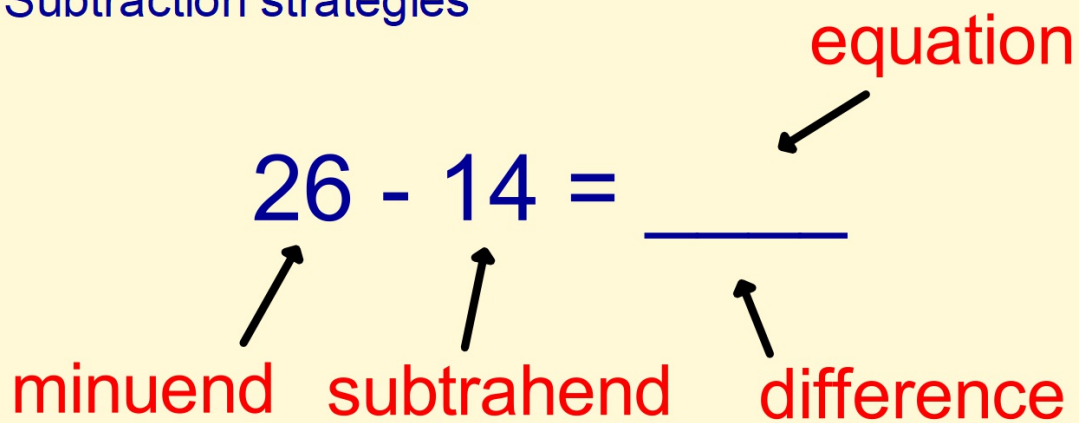


Subtraction strategies

$$26 - 14 = \underline{\quad}$$

minuend subtrahend difference

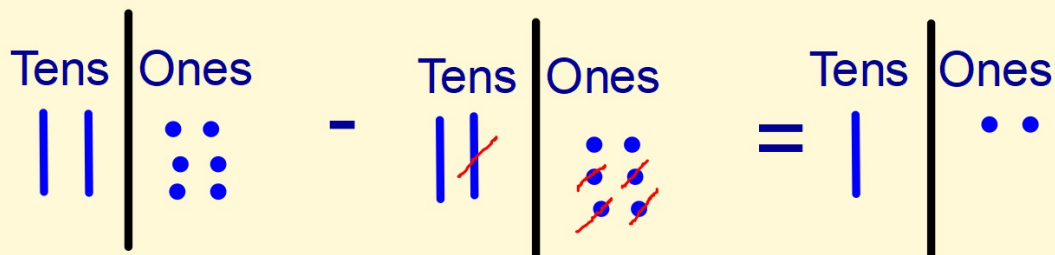
equation



Using place value knowledge

(Can take away real objects or cross off drawings)

Tens	Ones		Tens	Ones		Tens	Ones
	•• ••	-	 	•• ••	=		••

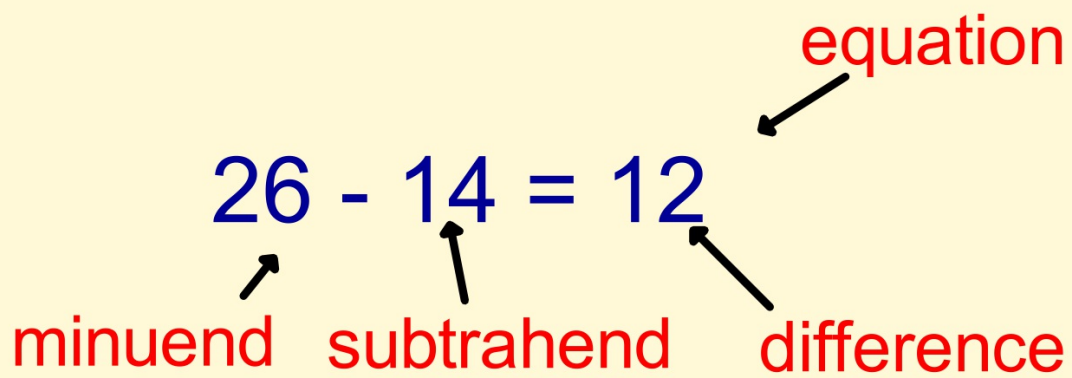


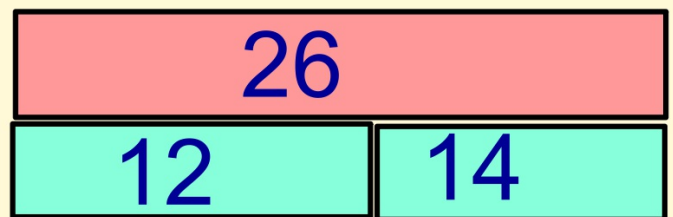
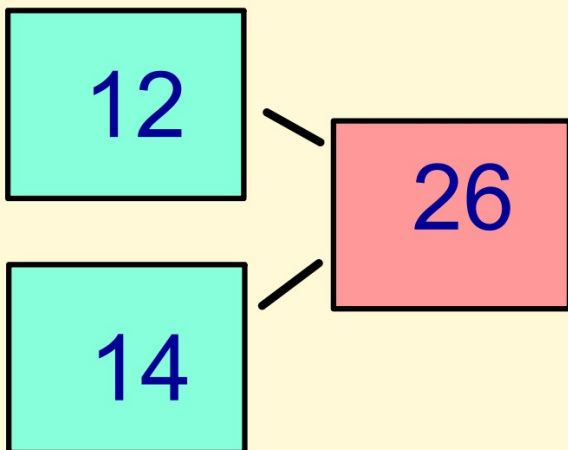
Subtraction equations

$$26 - 14 = 12$$

minuend subtrahend difference

equation

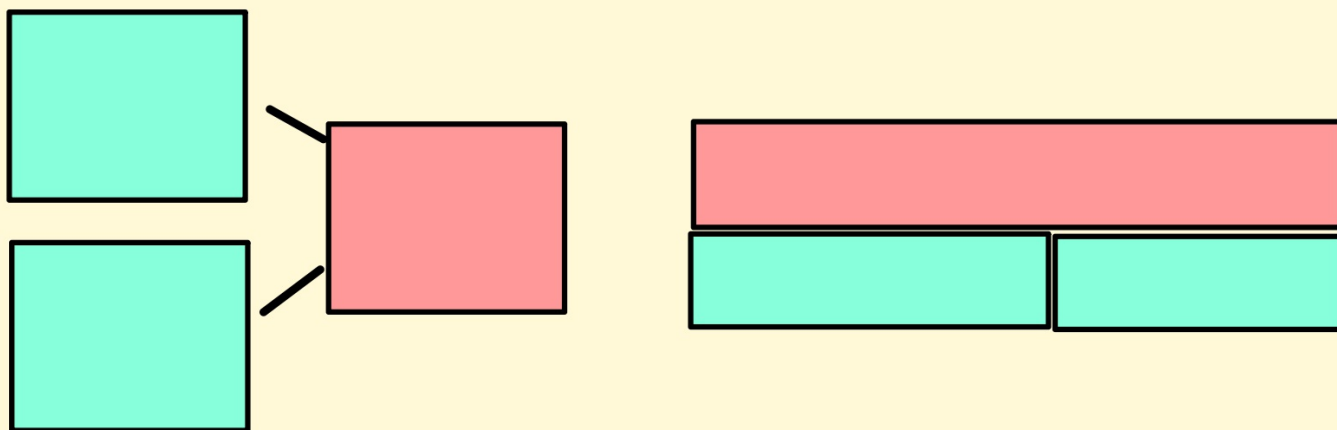




Your turn!

$$56 - 24 = \underline{\quad}$$

Tens	Ones		Tens	Ones		Tens	Ones
		+			=		



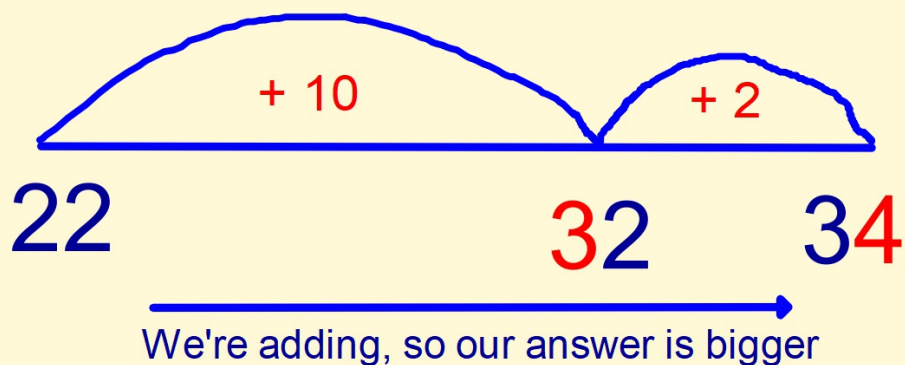
Addition on a number line

- Requires secure place value knowledge
- Good number sense and number bond knowledge
- Supports progression to mental methods

$$22 + 12 = \underline{\quad}$$

$\swarrow \searrow$
 $10 \quad 2$

← Partitioning



Addition on a number line

Your turn!

$$33 + 21 = \underline{\quad}$$



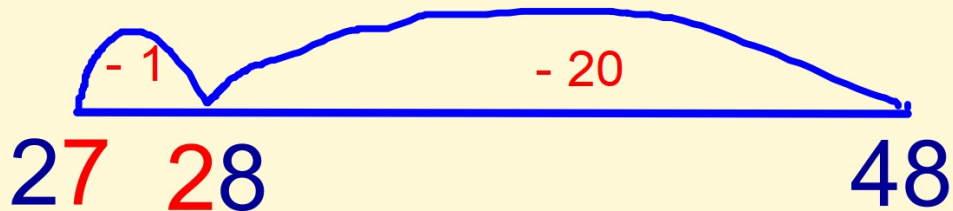
Subtraction on a number line

- Requires secure place value knowledge
- Good number sense and number bond knowledge
- Supports progression to mental methods

$$48 - 21 = \underline{\quad}$$


$\swarrow \searrow$
 $20 \quad 1$

← Partitioning



Subtraction on a number line

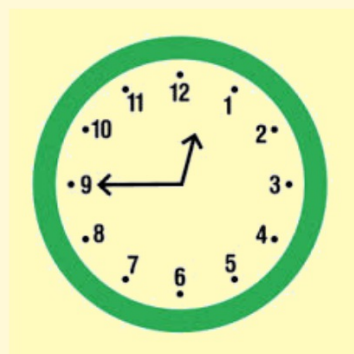
Your turn!

$$27 - 13 = \underline{\quad}$$


← Partitioning



How to support telling the time

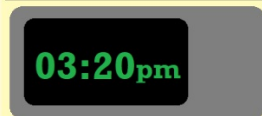
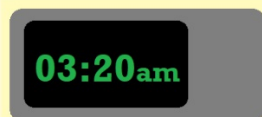


analogue

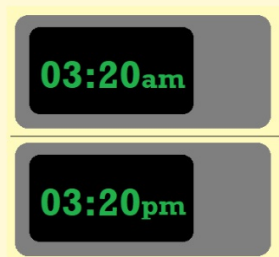
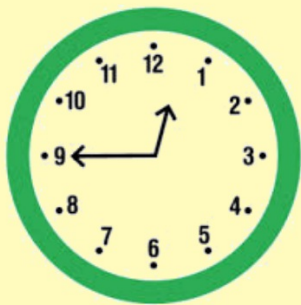
digital

am/ pm

24 hour



How to support telling the time



Ask your child what the time is.

Model looking at your watch/ a clock/ clock on your phone.

Ask what happens at certain times at the day.

"What time did we leave school?"

"What will you be doing at 6 o'clock?"

Tell them what will happen at certain times.

"You're going to bed at 7.30 / half past seven."

Your actions:

- Play games to support your child developing their number sense
- Help them solve simple addition and subtraction equations using the strategies we've practised today.
- Ask them to represent different equations using the part part whole model and the bar model.
- Every day, discuss reading the time.

Your actions:

- Have at least one conversation every day about real life uses of numbers



Write down another example

Any questions or worries, please see your class teacher or myself.

More information about strategies and resources will be given out at parents evening.

Thank you for coming. Please fill out an evaluation form.