
3
5
7
9
11
13

The next day…


2
4
6
8
10
12

Later that night…


HOMEWORK

NSW GOVERNMENT Education & Communities

Public Schools NSW

Targeted Early Numeracy

Parent Information

About the initiative

The Targeted Early Numeracy (TEN) intervention program fulfils a previous Government commitment to provide support for students experiencing substantial difficulty in learning numeracy in the early years.

TEN complements the regular school numeracy programs and the *Kindergarten Best Start Numeracy Assessment*.

Teaching occurs within a normal daily lesson block, without withdrawal or an additional specialist teacher.

Program goal

To ensure all students are on track with numeracy by the end of Stage 1.

Number Sense

TEN supports the learning of numeral identification, counting forwards and backwards and patterns in number.

Hands-on engaging activities encourage children to explore how numbers work.

Number sense assists children to develop the most efficient strategies in solving addition and subtraction problems.

How would you answer these questions?

$$39 + 40 = ?$$

$$17 + 6 = ?$$

$$56 + 35 = ?$$

Progression of learning

Counting by ones → using number combinations

Not automatic

- Visualisation
- Knowledge of number
- Place value

- The power of dominoes, dice and cards

Using Ten Frames

One of the basic components of numeracy is mental computation

One of the pre-requisites for mental computation facility is instant recall of basic facts

The ten frame is valuable for building visualisation of numbers 1 to 10, and also linking number pairs.

What does TEN look like in the classroom?

- Students working cooperatively in small groups at their own level
- Short, focussed, frequent numeracy sessions
- Explicit and systematic teaching
- Five - weekly monitoring of student progress to identify and plan future instruction.
- Hands-on teaching activities
- Talking about how they found their answers
- Learning about number as they are playing with numbers
- Writing less but computing more
- Children and teachers both having fun and enjoying mathematics

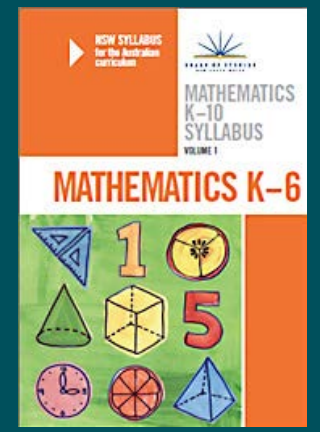
Key aspects for teachers

- Ongoing professional learning for teachers
- Understanding and using the Numeracy Continuum
- Implementing the assessment process
- Monitoring students' progress
- Program implementation within a whole class setting- no withdrawal
- Developing Learning Plans which focus on differentiation for individuals and groups
- Incorporating short, focused, frequent numeracy activities into the teaching program.

Targets

The TEN initiative has end of year minimum achievement targets for Kindergarten, Year 1 and Year 2 students. Teachers regularly monitor students progress against these targets.

Teachers will use their knowledge of the Numeracy Continuum and TEN strategies to plan teaching and learning opportunities for all children to access the content of the NSW Mathematics Syllabus.



Everyday Maths

1. Think about the activities you have done today that involve using numeracy skills

2. Discuss them with the person next to you

3. Share and discuss with the entire group

What maths have you used today?

time

money

measurement

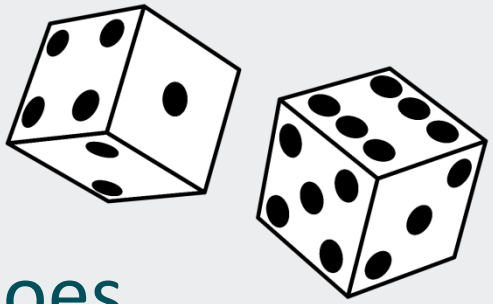
position

numeral identification

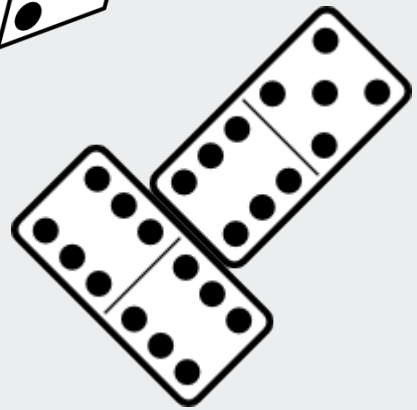
How you can support your child's learning in maths?

- Share a positive attitude towards maths with your child
- Talk about mathematics and solving problems
- Ask your child what they have learnt in maths
- Involve your child in activities such as counting, using money, cooking and identifying numbers in the environment
- Play card games and board games using dice as a family

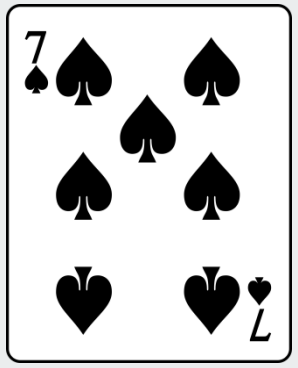
Must haves for home!



- Dominoes



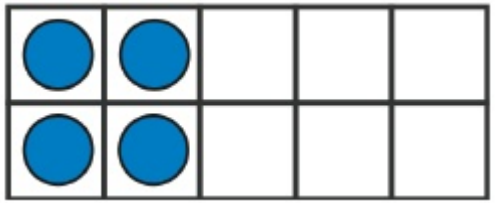
- Dice
- Card Games



Mathematics at Home

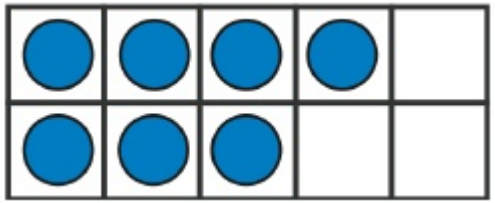
CHRISSY MONTELEONE, MATHEMATICS EDUCATION LECTURER AND CONSULTANT

Tens Frames



How many counters can you see?
How many more to 10?
What is our number sentence?
What about subtraction?

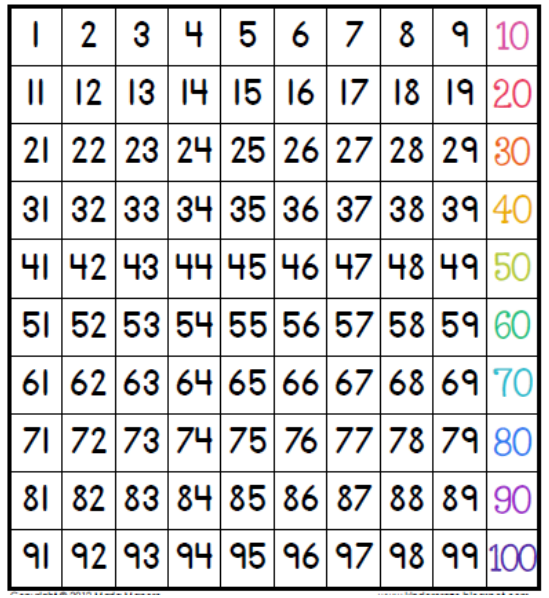
Tens Frames

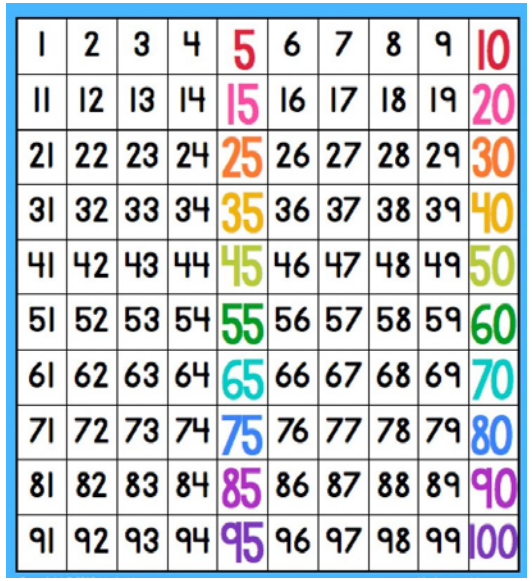


How many counters can you see?
How many more to 10?
What is our number sentence?
What about subtraction?

Hundreds Chart

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

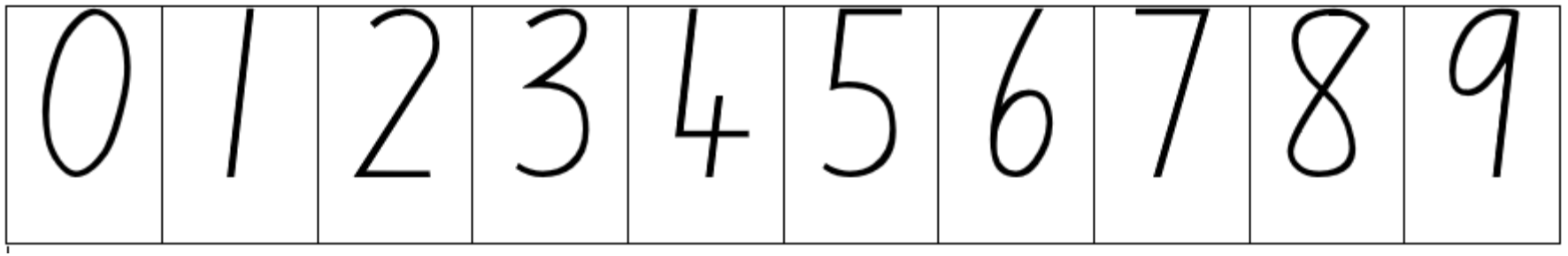




What patterns can you see?

What might happen if we count by 4s?

Now that we can count by 10s, can we count by 20s?


0 1 2 3 4 5 6 7 8 9

Make a 2-digit number

Make a 2-digit number

What do you know about this number?

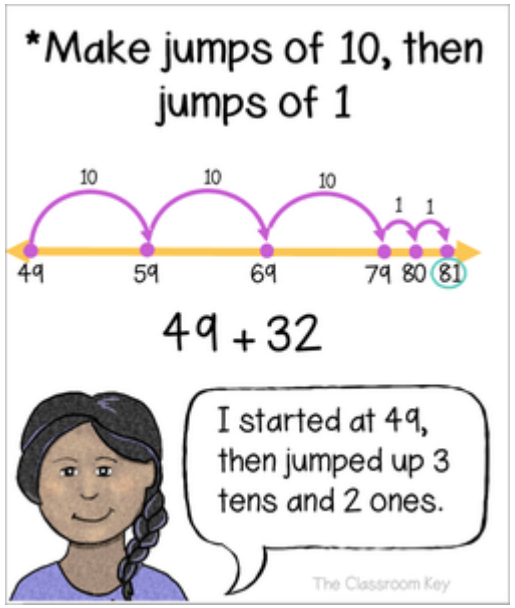
Number Bust!

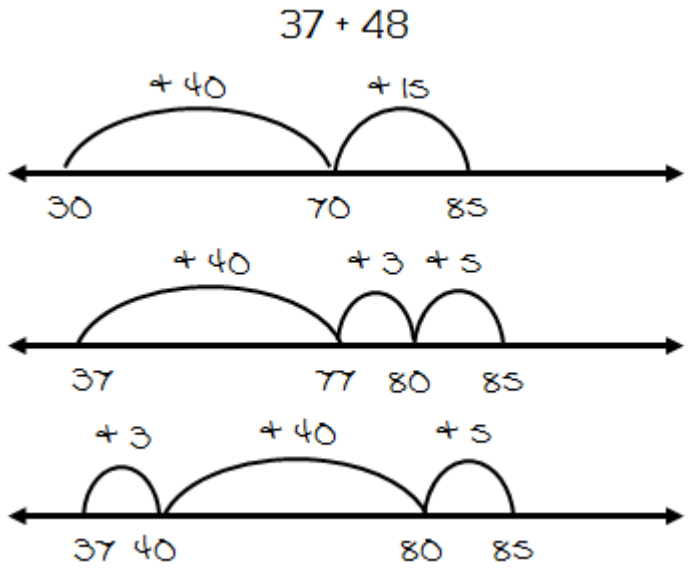
There are 5 tens	There are 3 ones	The 5 is positioned in the tens place	The 3 is positioned in the ones place
It is the number after 52	It is the number before 54	If you add 47, you get to 100	It costs $53 to buy…?
	The length of my table is 53 cm	What else?	

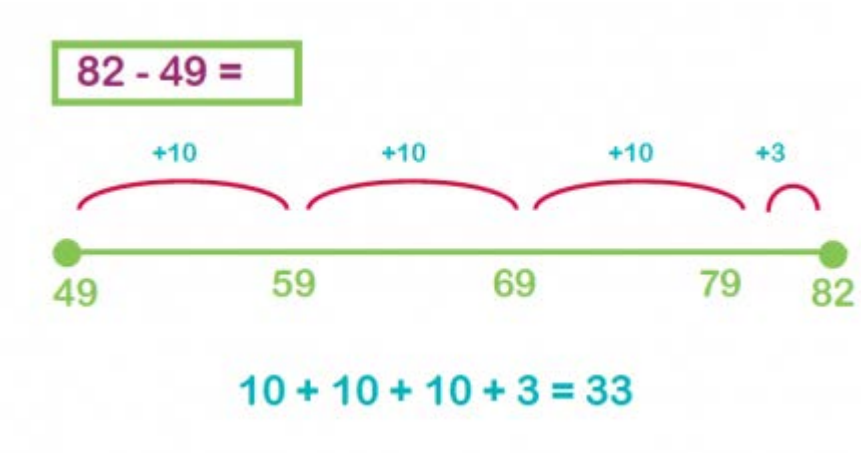
Make a 3-digit number

Number Bust!

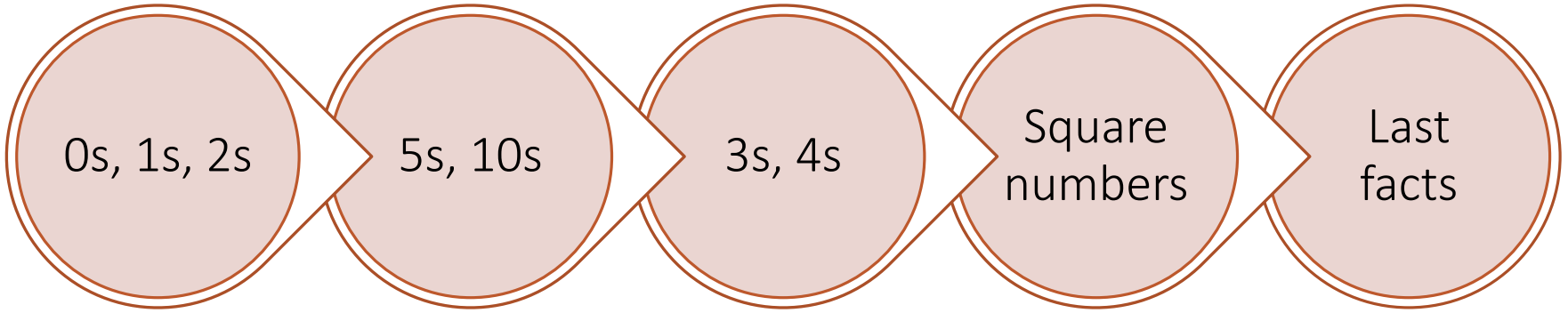
Number Lines







Multiplication Facts



X	1	2	3	4	5	6	7	8	9	10
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										

1s, 2s

X	1	2	3	4	5	6	7	8	9	10
1	1	2	3	4	5	6	7	8	9	10
2	2	4	6	8	10	12	14	16	18	20
3	3	6								
4	4	8								
5	5	10								
6	6	12								
7	7	14								
8	8	16								
9	9	18								
10	10	20								

5s, 10s

X	1	2	3	4	5	6	7	8	9	10
1	1	2	3	4	5	6	7	8	9	10
2	2	4	6	8	10	12	14	16	18	20
3	3	6			15					30
4	4	8			20					40
5	5	10	15	20	25	30	35	40	45	50
6	6	12			30					60
7	7	14			35					70
8	8	16			40					80
9	9	18			45					90
10	10	20	30	40	50	60	70	80	90	100

3s, 4s

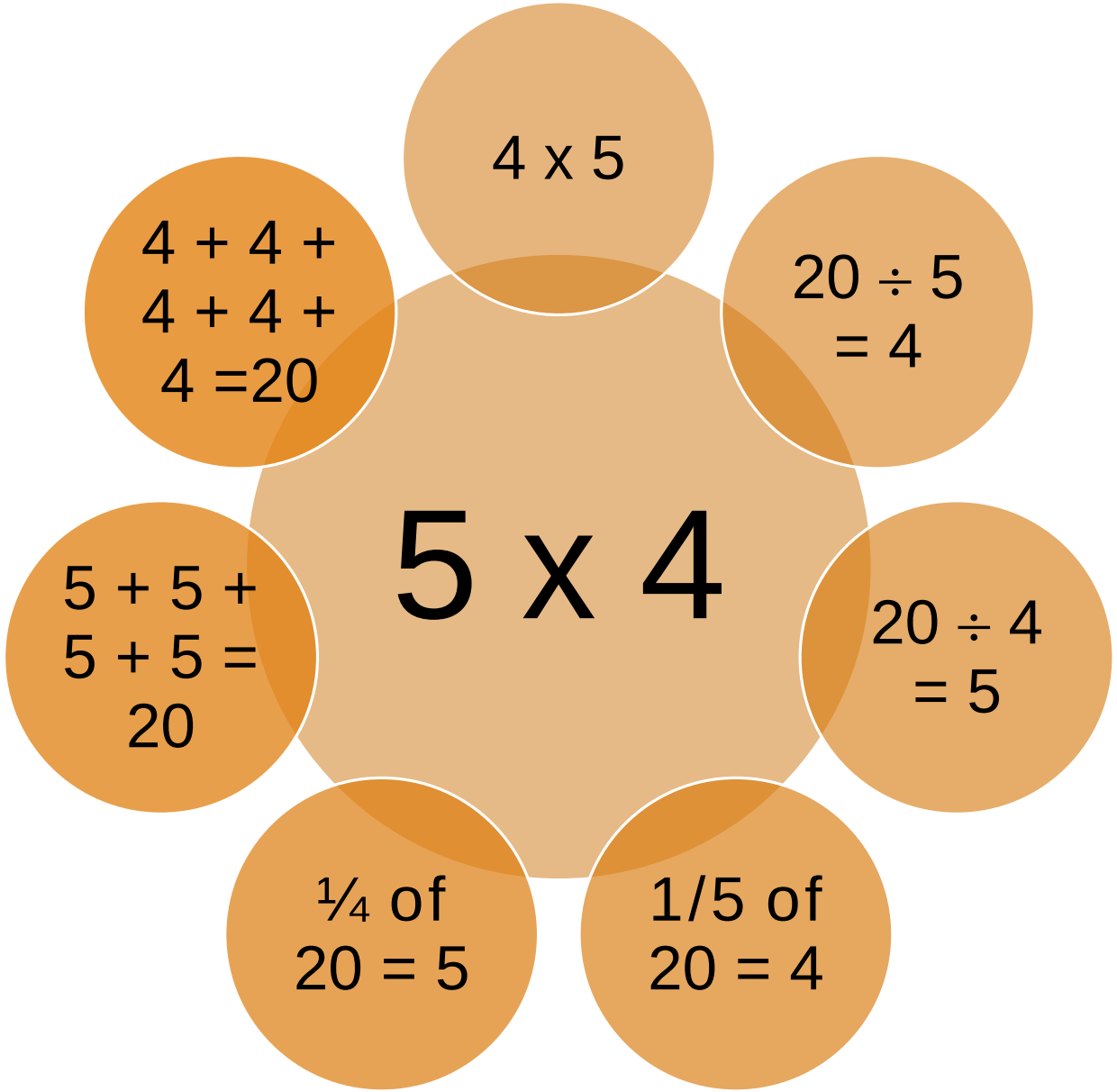
X	1	2	3	4	5	6	7	8	9	10
1	1	2	3	4	5	6	7	8	9	10
2	2	4	6	8	10	12	14	16	18	20
3	3	6	9	12	15	18	21	24	27	30
4	4	8	12	16	18	24	28	32	36	40
5	5	10	15	20	25	30	35	40	45	50
6	6	12	18	24	30					60
7	7	14	21	28	35					70
8	8	16	24	32	40					80
9	9	18	27	36	45					90
10	10	20	30	40	50	60	70	80	90	100

Square numbers

X	1	2	3	4	5	6	7	8	9	10
1	1	2	3	4	5	6	7	8	9	10
2	2	4	6	8	10	12	14	16	18	20
3	3	6	9	12	15	18	21	24	27	30
4	4	8	12	16	18	24	28	32	36	40
5	5	10	15	20	25	30	35	40	45	50
6	6	12	18	24	30	36				60
7	7	14	21	28	35		49			70
8	8	16	24	32	40			64		80
9	9	18	27	36	45				81	90
10	10	20	30	40	50	60	70	80	90	100

Last facts

X	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
1	1	2	3	4	5	6	7	8	9	10
2	2	4	6	8	10	12	14	16	18	20
3	3	6	9	12	15	18	21	24	27	30
4	4	8	12	16	18	24	28	32	36	40
5	5	10	15	20	25	30	35	40	45	50
6	6	12	18	24	30	36	***42***	***48***	***54***	60
7	7	14	21	28	35	***42***	49	***56***	***63***	70
8	8	16	24	32	40	***48***	***56***	64	***72***	80
9	9	18	27	36	45	***54***	***63***	***72***	81	90
10	10	20	30	40	50	60	70	80	90	100


5 x 4
4 x 5
20 ÷ 5 = 4
20 ÷ 4 = 5
1/5 of 20 = 4
¼ of 20 = 5
5 + 5 + 5 + 5 = 20
4 + 4 + 4 + 4 + 4 =20

Real-life Mathematics at Home