

YEAR ONE MATHS



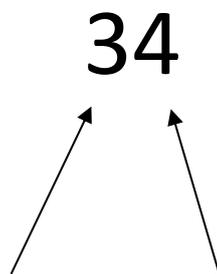
Please use the activities in this booklet to help your child with the Weekly Maths Facts home learning.

Counting in Year One is crucial to children achieving some of the key objectives. They need to be able to:

- count forwards and backwards to 100
- read & write numbers to 100 in numerals
- identify one more and one less than numbers to 100
- represent and use number bonds and related subtraction facts within 20

There are lots of other key objectives for Year One, but counting is an area in which lots & lots of repetition helps. You will see from the objectives above that the children not only need to be able to count by rote, but need to be able to understand how numbers work so they can use their counting to work out the answers to simple questions.

We teach the children about the tens digit & the units digit in a number.



There are 3 tens

There are 4 units

Count **forwards** in 1s to 100 from 0 or from any number.

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

**** Counting in ones is the same as **adding** one every time ****

Do it in stages

1. Can you count to 10 without stopping?
2. Can you count to 20 without stopping?
3. Can you count to 30 without stopping?
4. Can you count to 40 without stopping?
5. Can you count to 50 without stopping?
6. Can you count to 60 without stopping?
7. Can you count to 70 without stopping?
8. Can you count to 80 without stopping?
9. Can you count to 90 without stopping?
10. Can you count to 100 without stopping?

Mix it up!

Can you count in a quiet voice?

Can you count in a loud voice?

Can you count in a slow voice?

Can you count in a quick voice?

Can you count in a posh voice?

Can you count in a silly voice?

**** Check they get 'teen' and 'ty' right ****

11. Can they count from a different number?

Can you count on from 23?

Can you count on from 36?

Can you count on from 57?

12. Can they count between different numbers?

Can you count on from 12 and stop at 19?

Can you count on from 28 and stop at 44?

Can you count on from 78 and stop at 87?

a) <https://www.youtube.com/watch?v=u-FVERzap9E> Count to 20

b) <https://www.youtube.com/watch?v=d9pfGCquhCM> Count to 20

c) <https://www.youtube.com/watch?v=p61OEW1PC4> Good for seeing what the numbers look like. Quite slow but allows children time to visualise the numbers.

d) <https://www.youtube.com/watch?v=estMnWVEjrk> Count to 100

e) <https://www.youtube.com/watch?v=0TgLf3PMOc> crazy song that encourages children to exercise whilst counting to 100!

f) <http://www.topmarks.co.uk/learning-to-count/teddy-numbers>
Counting to 15

g) http://www.bbc.co.uk/schools/starship/maths/games/park_the_pods/big_sound/full.shtml Counting on forwards & backwards

- h) <http://www.ictgames.com/postletter.html> Recognising numbers to 100
- i) <http://www.primarygames.co.uk/pg2/splat/splatsq100.html>
Number recognition. You say the number and your child has to splat that square. 'Splat 24 red!'
- j) http://www.ictgames.com/sharkNumbers/sharkNumbers_v5.html
Counting tens & ones to identify a number
- k) http://www.ictgames.com/caterpillar_slider.html Ordering numbers
- l) http://www.ictgames.com/counting_cars_changecars.html
Counting on from a given number. Great for children who like car games!
- m) <http://www.ictgames.com/sasNumberSort/index.html> Ordering numbers - you can choose the range of numbers
- n) <http://www.topmarks.co.uk/ordering-and-sequencing/chinese-dragon-ordering> Ordering numbers 1-20.
- o) <http://www.topmarks.co.uk/ordering-and-sequencing/chinese-dragon-ordering> Ordering numbers 1-100.
- p) http://www.abcya.com/numerical_order.htm Ordering numbers in stages.

Count **backwards** in 1s from 100 to 0 or any number.

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

**** Counting *backwards* in ones is the same as *taking away* one every time ****

Do it in stages

1. Can you count back from 10 without stopping?
2. Can you count back from 20 without stopping?
3. Can you count back from 30 without stopping?
4. Can you count back from 40 without stopping?
5. Can you count back from 50 without stopping?
6. Can you count back from 60 without stopping?
7. Can you count back from 70 without stopping?
8. Can you count back from 80 without stopping?
9. Can you count back from 90 without stopping?
10. Can you count back from 100 without stopping?

Mix it up!

- Can you count back in a quiet voice?
- Can you count back in a loud voice?
- Can you count back in a slow voice?
- Can you count back in a quick voice?
- Can you count back in a posh voice?
- Can you count back in a silly voice?

**** Check they get 'teen' and 'ty' right ****

11. Can they count from a different number?

- Can you count back from 84?
- Can you count back from 39?
- Can you count back from 51?

12. Can they count between different numbers?

- Can you count back from 19 and stop at 7?
- Can you count back from 35 and stop at 24?
- Can you count back from 68 and stop at 49?

- a) https://www.youtube.com/watch?v=srPkt4k_08 Counting back from 20 with dancing!
- b) <https://www.youtube.com/watch?v=ShqXL-zfLxY> Counting back from 20 with numbers still displayed after counting
- c) <https://www.youtube.com/watch?v=COuedSha1Dk> This clip allows you to choose by fast forwarding between 10-1, 50-1 & 100-1.
- d) <https://www.youtube.com/watch?v=NKUpnNnN-eA> Simply counting back from 100 with numbers on screen so children can visualise them. Pauses every 10 numbers.
- e) http://www.softschools.com/counting/games/counting_backwards_from_20/ Simple drag & drop game ordering 20-0.

- f) <http://www.oswego.org/ocsd-web/games/spookyseq/spooky1.html> Spooky ghosts with missing numbers to find.
- g) <http://www.topmarks.co.uk/ordering-and-sequencing/caterpillar-ordering> Ordering numbers backwards 20-0.
- h) <http://www.topmarks.co.uk/ordering-and-sequencing/caterpillar-ordering> Ordering numbers backwards 100-0.

Count, **read and write** numbers to 100 in numerals.

Write a number & ask your child, 'What number is this?'

Say a number & ask your child, 'Can you write ___ for me?'

Do it in stages

1. Can you identify numbers to 10?
2. Can you identify numbers to 20?
3. Can you identify numbers to 30?
4. Can you identify numbers to 40?
5. Can you identify numbers to 50?
6. Can you identify numbers to 60?
7. Can you identify numbers to 70?
8. Can you identify numbers to 80?
9. Can you identify numbers to 90?
10. Can you identify numbers to 100?

Support your child to think about how the number will look.

eg. 53

What will the tens digit be if it starts with 50? 5

What will the units digit be if it ends in 3? 3

If they get the digits the wrong way round, ask them to re-read it. If they still don't spot the problem, ask them:

Hmmm. That says 35. What do we need to do to make sure it says 53?

Given a number, identify one more and one less.

Start with one more than. Remind your child that finding one more than is the same as counting **forwards** in ones.

Encourage them to use their counting to find the answer. Count forwards first to remind them what they are going to use to work out answer.

Only ask your child to find one more than for numbers that they are confident with. Remind them that only the units digit changes when they find one more than unless the units digit is 9 when the tens digit changes too eg. 29 becomes 30 when you find one more than.

1. What is one more than (0-10)?
2. What is one more than (0-20)?
3. What is one more than (0-30)?
4. What is one more than (0-40)?
5. What is one more than (0-50)?
6. What is one more than (0-60)?
7. What is one more than (0-70)?
8. What is one more than (0-80)?
9. What is one more than (0-90)?
10. What is one more than (0-100)?

Move on to one less than. Remind your child that finding one less than is the same as counting **backwards** in ones.

Encourage them to use their counting to find the answer. Count backwards first to remind them what they are going to use to work out answer.

Only ask your child to find one less than for numbers that they are confident with. Remind them that only the units digit changes when they find one less than unless the units digit is 0, when the tens digit changes too eg. 20 becomes 19 when you find one less than.

1. What is one less than (0-10)?
2. What is one less than (0-20)?
3. What is one less than (0-30)?
4. What is one less than (0-40)?
5. What is one less than (0-50)?
6. What is one less than (0-60)?
7. What is one less than (0-70)?
8. What is one less than (0-80)?
9. What is one less than (0-90)?
10. What is one less than (0-100)?

Represent & use **number bonds** & related **subtraction facts** within 20

Number bonds are any numbers that can be combined to make a particular total eg. $4+1=5$, $3+2=5$, $5+0=5$, $1+4=5$, $2+3=5$, $0+5=5$.

They also need to be able to use the 'reverse' subtraction facts eg. $5-1=4$, $5-4=1$.

Obviously, the children cannot memorise every fact to 20! However, it is really helpful if they can remember number bonds to 10 and to 20 and understand that the same numbers can be used to make subtraction number sentences.

Number bonds to 10:

$0+10=10$ $10+0=10$
 $1+9=10$ $9+1=10$
 $2+8=10$ $8+2=10$
 $3+7=10$ $7+3=10$
 $4+6=10$ $6+4=10$
 $5+5=10$

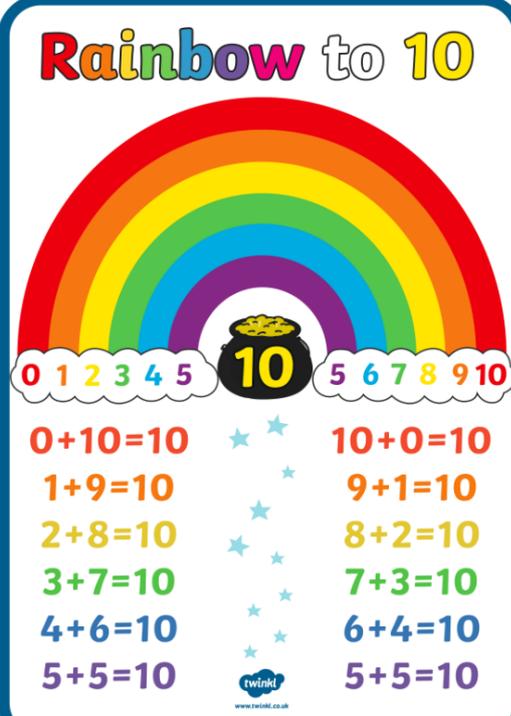
Number bonds to 20:

$0+20=20$ $20+0=20$
 $1+19=20$ $19+1=20$
 $2+18=20$ $18+2=20$
 $3+17=20$ $17+3=20$
 $4+16=20$ $16+4=20$
 $5+15=20$ $15+5=20$
 $6+14=20$ $14+6=20$
 $7+13=20$ $13+7=20$
 $8+12=20$ $12+8=20$
 $9+11=20$ $11+9=20$
 $10+10=20$

- <https://www.youtube.com/watch?v=-74-3WSrD0> Number bonds
- <http://www.amblesideprimary.com/ambleweb/mentalmaths/numberbond.html> Number bonds to 10 game.
- http://www.ictgames.com/save_the_whale_v4.html Number bonds to 10 game.

- d) http://www.mathplayground.com/number_bonds_10.html
Number bonds to 10 - match the numbers before time runs out!
- e) <http://www.topmarks.co.uk/maths-games/hit-the-button>
Number bonds to 10 or to 20.
- f) http://www.mathplayground.com/number_bonds_20.html
Number bonds to 20 - match the numbers before time runs out!!
- g) <http://www.topmarks.co.uk/Flash.aspx?b=maths/addition> Repair the water slide so the fun can begin.

Rainbow to 10



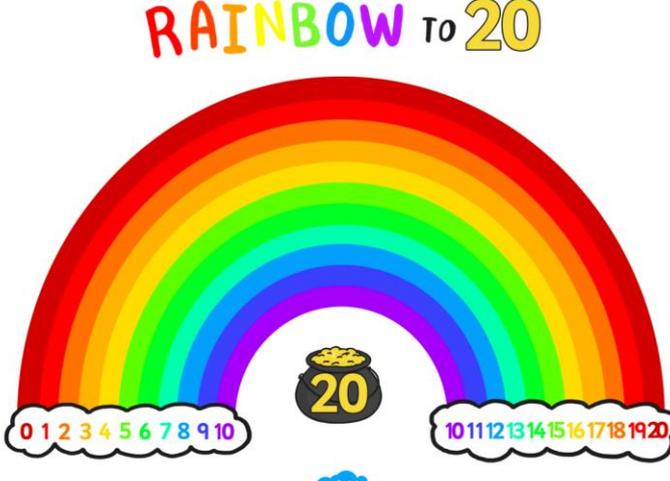
A colorful activity card titled "Rainbow to 10". It features a rainbow with a pot of gold at the base containing the number 10. Below the rainbow is a number line from 0 to 10. The card lists ten addition facts: 0+10=10, 1+9=10, 2+8=10, 3+7=10, 4+6=10, 5+5=10, 10+0=10, 9+1=10, 8+2=10, 7+3=10, 6+4=10, and 5+5=10. There are blue stars and a Twinkl logo at the bottom.

0 1 2 3 4 5 **10** 5 6 7 8 9 10

0+10=10 10+0=10
1+9=10 9+1=10
2+8=10 8+2=10
3+7=10 7+3=10
4+6=10 6+4=10
5+5=10 5+5=10

twinkl
www.twinkl.co.uk

RAINBOW To 20



A colorful activity card titled "RAINBOW To 20". It features a large rainbow with a pot of gold at the base containing the number 20. Below the rainbow are two number lines: one from 0 to 10 and another from 10 to 20. There is a Twinkl logo at the bottom.

0 1 2 3 4 5 6 7 8 9 10 10 11 12 13 14 15 16 17 18 19 20

twinkl

Useful Year 1 number facts:

1. Count in 2s

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

- <https://www.youtube.com/watch?v=8wwydguSKOU> Count with the monkeys – they do go all the way to 50 & then 100 though.
- <https://www.youtube.com/watch?v=GvTcpfSnOMQ> Counting is taken in smaller stages with animals in space!
- <http://www.sheppardsoftware.com/mathgames/earlymath/BalloonPopSkip.htm> Pop the balloons as you count in 2s.
- <http://www.ictgames.com/fishy2s.html> You'll have to be quick to catch the fish!

2. Count in 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
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

- a) <https://www.youtube.com/watch?v=awKlEMyleA> Counting in 5s as you boogie.
- b) http://www.ictgames.com/fairyfog5s_v2.html Pick the missing number.
- c) <http://www.sheppardsoftware.com/mathgames/earlymath/BalloonPopSkip.htm> Pop the balloons as you count in 5s.

3. Count in 10s

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

- a) <https://www.youtube.com/watch?v=vq3cDj3Uj3I> One song that does it all – count by 2s, 5s & then 10s!
- b) <http://www.ictgames.com/newduckshoot10s.html> Shoot the ducks by working out where the number comes in the line.
- c) http://www.abcya.com/number_bubble_skip_counting.htm Pop the bubbles so the chests close.

4. Remember doubles to 20

$$\begin{array}{lll} 1+1=2 & 2+2=4 & 3+3=6 \\ 4+4=8 & 5+5=10 & 6+6=12 \\ 7+7=14 & 8+8=16 & 9+9=18 & 10+10=20 \end{array}$$

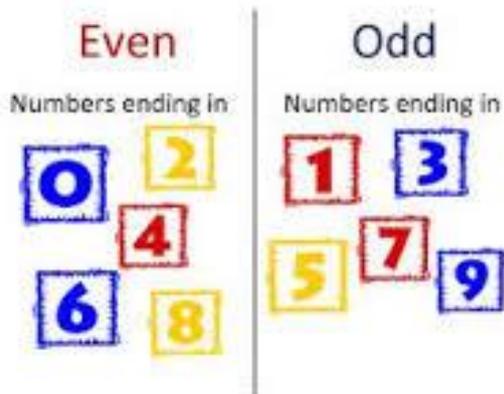
- a) <http://www.ictgames.com/robindoubles.html> Hit the target with the correct number.
- b) <http://www.topmarks.co.uk/maths-games/hit-the-button> Choose your doubling range & hit the button!
- c) <http://www.maths-games.org/ladybird-doubles.html> Match the doubling question and answer cards.

5. Remember halves to 20

$$\begin{array}{ll} \text{half 2 is 1} & \text{half 4 is 2} \\ \text{half 6 is 3} & \text{half 8 is 4} \\ \text{half 10 is 5} & \text{half 12 is 6} \\ \text{half 14 is 7} & \text{half 16 is 8} \\ \text{half 18 is 9} & \text{half 20 is 10} \end{array}$$

- a) <http://www.topmarks.co.uk/maths-games/hit-the-button> Choose your halving range & hit the button!
- b) <http://www.topmarks.co.uk/Flash.aspx?f=inversemachinev3>
Good for getting children to guess the answer and then put the number through the 'inverse machine' & seeing if they were right.

6. Learning about odd numbers and even numbers



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

- <http://www.doorwayonline.org.uk/number/oddandeven/>
Progression of interactive games to explore odd & even numbers.
- http://www.bbc.co.uk/schools/starship/maths/games/number_jumbler/big_sound/full.shtml More advanced – children need to recognise that the units digit shows whether a number is odd or even.
- http://www.sheppardsoftware.com/mathgames/earlymath/Fruit_shoot_odd_even.htm Fruit splat for odd & even.

Other useful things Year 1 children need to know:

1. Coin & note recognition.



What are the clues that tell me what coin/note it is?

What shape is it?

What size is it?

What colour is it?

Does it have a number or a word on it?

How many 1ps are there in a £1?

Which is worth more – a 2p or a £2? Why?

<http://www.topmarks.co.uk/Flash.aspx?f=coins> Ordering 6 coins.

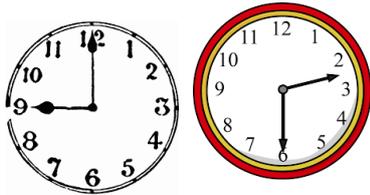
<http://www.ictgames.com/moneysplat.html> Splat the hand that hold the correct amount of money.

<http://www.crickweb.co.uk/ks2numeracy-money-and-mean.html#MMATCH> Match the amount with the correct coins – you can chose the range of amounts.

2. Telling the time for o'clock and half past times.

Children need to be able to read an analogue clock time for o'clock and half past times and they need to show the time by drawing on the long minute hand and short hour hand on a blank clock face.

Talking about the time that you do things in your daily routine will help to familiarise children with the concept. Point out the time when your child sees a clock or challenge them to tell you the time.



There are lots of great Apps for telling the time too for tablets or smartphones.

Make your own clock!

<http://www.pbs.org/parents/crafts-for-kids/make-your-own-clock/>

...using a paper plate.

<http://www.kids-activities-learning-games.com/clock-games.html>

Under 'Clock Crafts' click on **clock model** for a downloadable template.

Practise...

- a) http://www.abcya.com/telling_time.htm Good for showing that the hour hand follows the minute hand and that there is am & pm – level 1 only.
- b) <http://www.teachingtime.co.uk/clock/clockres.html> Set it to an o'clock time to begin with & then alter by an hour or ½ hour.
- c) <http://www.teachingtime.co.uk/draggames/sthec1.html> More advanced as children need to know analogue and digital times. Stop the clock as fast as you can!