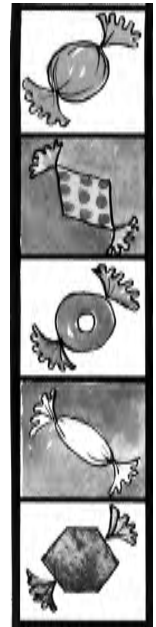


Sweet Counter

Place Value Made Easy!



125

Photocopiable maths worksheets to be used with the Sweet Counter Place Value cards.

My Workbook



2



8

by:

Counting On

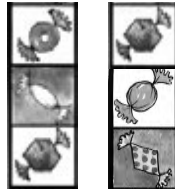
Use your Counter cards and **count on** from **10**. Complete.

eg:



10

+



= 16



11



17



12



18



13



19



14



20



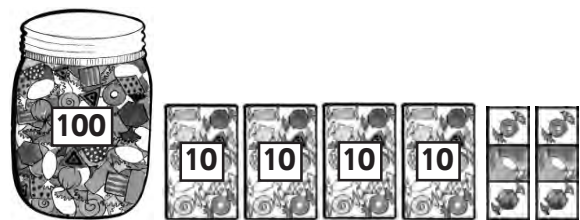
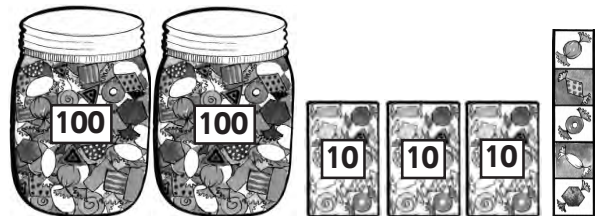
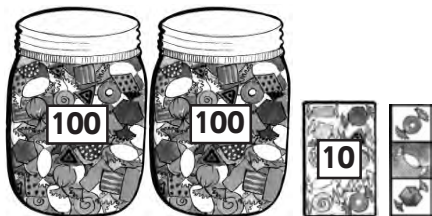
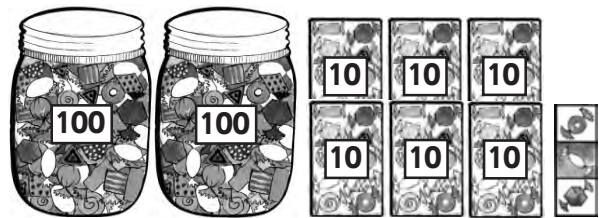
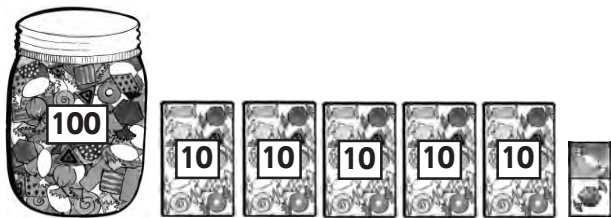
15



21

Hundreds, Tens and Ones

Use your Sweet Counter to find how many sweets are on the counter.
Write your answer on the dotted line.



In the space below, draw pictures for the numbers 136 and 243.

Place Value

The place in which the number stands makes all the difference to its **value**.
Look at your Sweet Counters.



1 hundred

or



1 ten

or



1 unit

	h	t	u
			1
		1	0
1	0	0	

1 can be a single sweet, unit or one.

1 can be 1 box of 10 or 1 ten.

1 can be 1 jar of 100 or 1 hundred.

Which is worth the most? Its **value** depends on its **place**!

Look at the different numbers you can make using 1, 2 and 3.

Draw the correct pictures to illustrate these numbers.

132

123

213

321

231

312

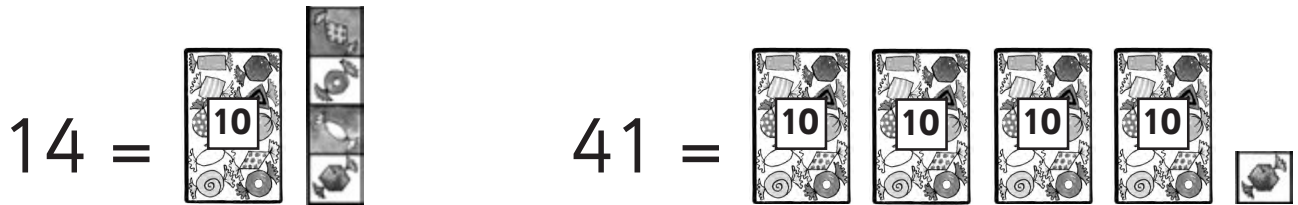
Can you put the above numbers in order starting with the smallest?

123

The Importance of Place

It is important to look carefully at the numbers, and **write them down in the correct place.**

Look at the difference between 14 and 41, e.g.



Now draw the picture for these numbers.

24 _____ 42 _____

71 _____ 17 _____

36 _____ 63 _____

21 _____ 12 _____

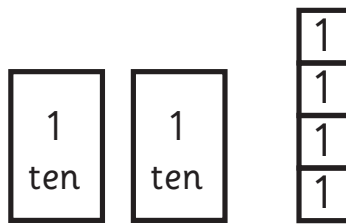
25 _____ 52 _____

51 _____ 15 _____

26 _____ 62 _____

1 hundred, 1 tens or 1

Use your Sweet Counter to complete these.



2 tens and 4 units = 24

24 means _____ boxes of ten and _____ sweets.

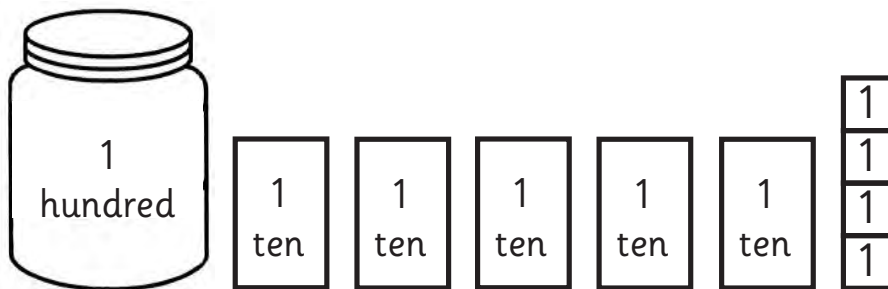
35 means _____ boxes of ten and _____ sweets.

64 means _____ boxes of ten and _____ sweets.

48 means _____ boxes of ten and _____ sweets.

Now try some with hundreds in - they are just as easy!

Keep looking at your Sweet Counter to help you.



154 means _____ hundred, _____ tens, _____ units.

246 means _____ hundred, _____ tens, _____ units.

538 means _____ hundred, _____ tens, _____ units.

342 means _____ hundred, _____ tens, _____ units.

627 means _____ hundred, _____ tens, _____ units.

943 means _____ hundred, _____ tens, _____ units.

Number Value

What does the digit mean? Look and think about the place in which it stands! Is it a **hundred**, a **ten** or a **unit**?

Keep looking at your Sweet Counter to check.

In the 3 means

In the 2 means

In the 7 means

In the 9 means

In the 6 means

In the 8 means

In the 7 means

In the 9 means

In the 2 means

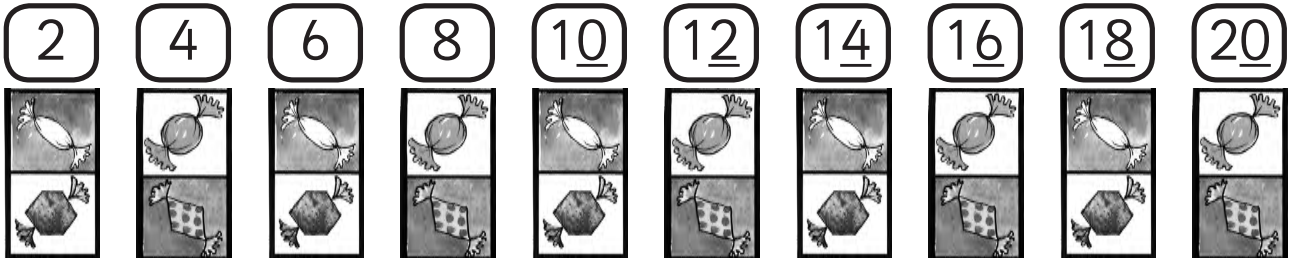
In the 1 means

In the 2 means

In the 3 means

Counting in 2's

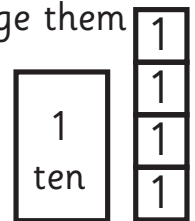
Use your Sweet Counter to count in 2's. Can you see the pattern 2, 4, 6, 8, 0?



Now fill in this table with numbers from 1 - 50, and then shade in the numbers you land on when you count in 2's.

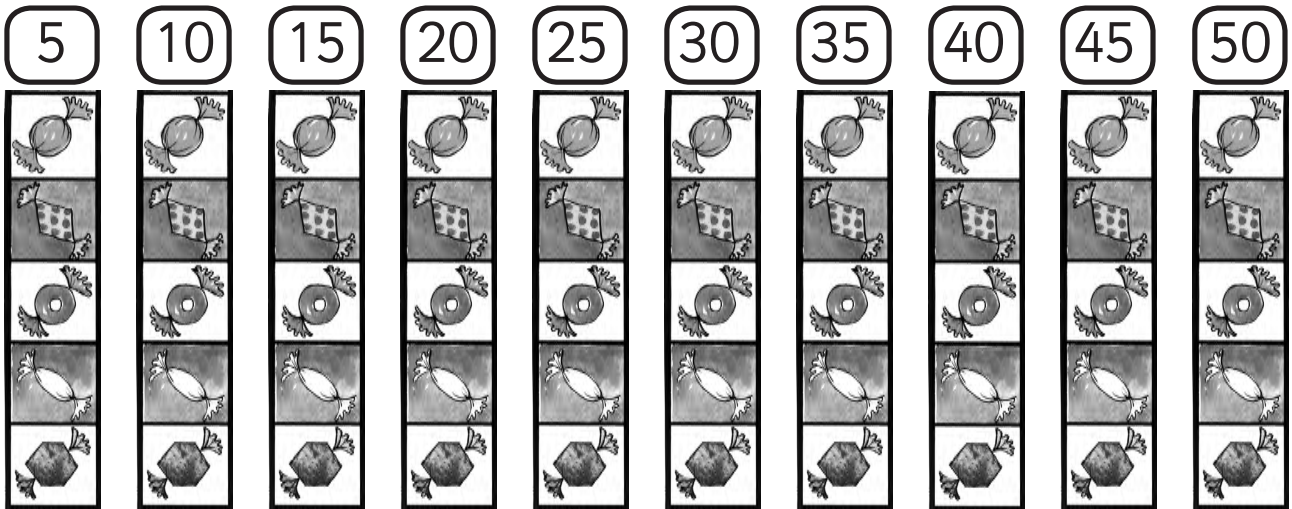
	2		4		6				10
11				15			18		
		23				27			
	32				36				40
41				45				49	

Every time you count ten units, you can exchange them for 1 box of ten. Count these numbers in 2's with your Sweet Counter and exchange them for tens and units. Can you draw the picture?



- 14 can be exchanged for 1 ten and 4 units
- 16 can be exchanged for _____
- 18 can be exchanged for _____
- 22 can be exchanged for _____
- 20 can be exchanged for _____

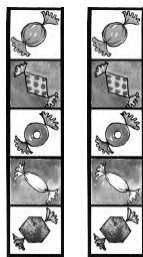
Counting in 5's



When you count in 5's, the answers always end in a _____ or _____
 Now count in 5's and fill in the missing numbers.

5, _____, _____, _____, _____, 30, _____, _____, _____, 50
 15, _____, _____, _____, 35, _____, _____, _____, 60
 20, _____, _____, _____, _____, 45, _____, _____, 65

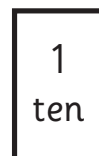
Take out your Sweet Counter. There are 2 sets of 5 in each ten.



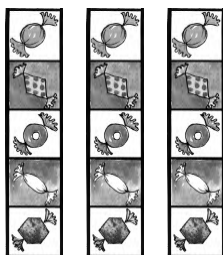
can be exchanged for



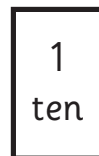
or



Counting in 5's is your 5 times table. Count and exchange your answer for tens and units.



can be exchanged for



1 set of 5 = 4 sets of 5 = 7 sets of 5 =
 2 sets of 5 = 5 sets of 5 = 8 sets of 5 =
 3 sets of 5 = 6 sets of 5 = 9 sets of 5 =

Number Bonds

Make 10 first, and then it is easy to make 20!

The **units will be the same**, but there will be **1 ten in front**.

$4 + \square = 10$

$4 + \square = 20$

$7 + \square = 10$

$7 + \square = 20$

$2 + \square = 10$

$2 + \square = 20$

$1 + \square = 10$

$1 + \square = 20$

$6 + \square = 10$

$6 + \square = 20$

$8 + \square = 10$

$8 + \square = 20$

$3 + \square = 10$

$3 + \square = 20$

$5 + \square = 10$

$5 + \square = 20$

Now try and make 30.

Remember the **units are the same as making 10**.

$6 + \square = 10$

$8 + \square = 10$

$6 + \square = 20$

$8 + \square = 20$

$6 + \square = 30$

$8 + \square = 30$

Making 10, 20, 30, 40

Make 10 first, and then keep the units the same!
Just **change the tens** to make 20, 30 and 40.

$2 + \square = 10$

$4 + \square = 10$

$3 + \square = 10$

$5 + \square = 10$

$6 + \square = 10$

$1 + \square = 10$

$2 + \square = 20$

$4 + \square = 20$

$3 + \square = 20$

$5 + \square = 20$

$6 + \square = 20$

$1 + \square = 20$

make 30

$2 + \square = 30$

$4 + \square = 30$

$3 + \square = 30$

$5 + \square = 30$

$6 + \square = 30$

$1 + \square = 30$

make 40

$2 + \square = 40$

$4 + \square = 40$

$3 + \square = 40$

$5 + \square = 40$

$6 + \square = 40$

$1 + \square = 40$

Making 10, 20, 30, 40 and 50

Make 10 first, and keep the units the same!

Just **change the tens** to make 20, 30 and 40.

$2 + \square = 10$

$2 + \square = 20$

$2 + \square = 30$

$2 + \square = 40$

$2 + \square = 50$

$5 + \square = 10$

$5 + \square = 20$

$5 + \square = 30$

$5 + \square = 40$

$5 + \square = 50$

$9 + \square = 10$

$9 + \square = 20$

$9 + \square = 30$

$9 + \square = 40$

$9 + \square = 50$

$4 + \square = 10$

$4 + \square = 20$

$4 + \square = 30$

$4 + \square = 40$

$4 + \square = 50$

$3 + \square = 10$

$3 + \square = 20$

$3 + \square = 30$

$3 + \square = 40$

$3 + \square = 50$

$6 + \square = 10$

$6 + \square = 20$

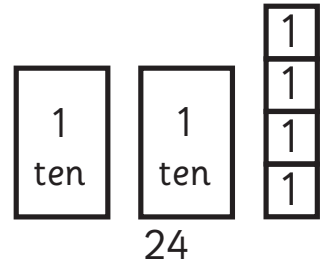
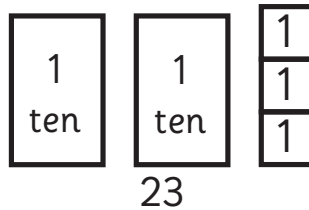
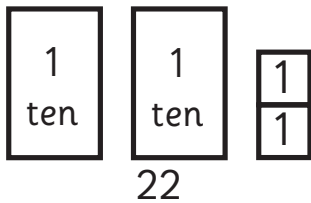
$6 + \square = 30$

$6 + \square = 40$

$6 + \square = 50$

Number Lines

Think of a number, for example 23. Which is the number **before**, and the number **after it**? You only have to **change the units**, as the **tens will stay the same**. Look at your Sweet Counter.



Now try these. Write the number **before** and the number **after**.

___ 34 ___

___ 62 ___

___ 58 ___

___ 23 ___

___ 17 ___

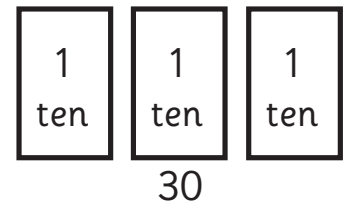
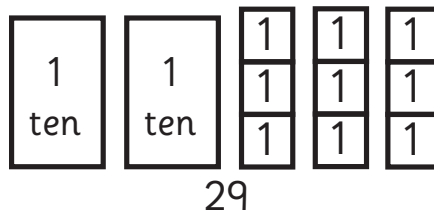
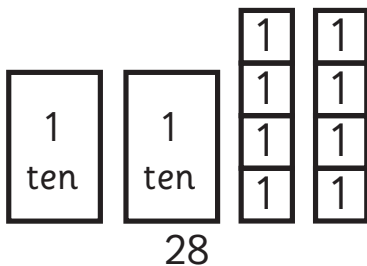
___ 67 ___

___ 75 ___

___ 42 ___

___ 86 ___

But look what happens when the number ends in a 9!



___ 29 ___

___ 49 ___

___ 69 ___

___ 59 ___

___ 79 ___

___ 39 ___

___ 89 ___

___ 9 ___

___ 19 ___

Now think about the number before and after these numbers.

___ 40 ___

___ 60 ___

___ 90 ___

___ 80 ___

___ 50 ___

___ 70 ___

Counting on in Tens

10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, 140, 150

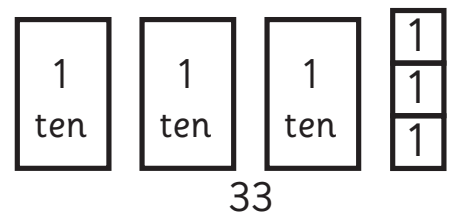
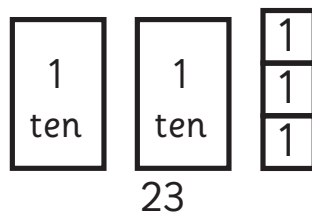
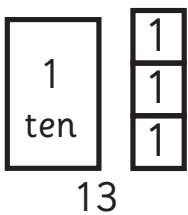
It is easy to count in 10's. Use your Sweet Counter. Turn your boxes over. You are really counting;

1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 tens

You are using your number line in your head, but jumping in 10's. Look!

0 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**

Now do exactly the same, but start on a different number. Set out 13 of your Sweet Counters.



Look at the sweet units. The **units or ones are going to stay the same**, but you are going to add **1 extra ten** each time.

Now try these. Count in tens starting at;

18, _____, _____, _____, _____, 68

26, _____, _____, _____, _____, 76

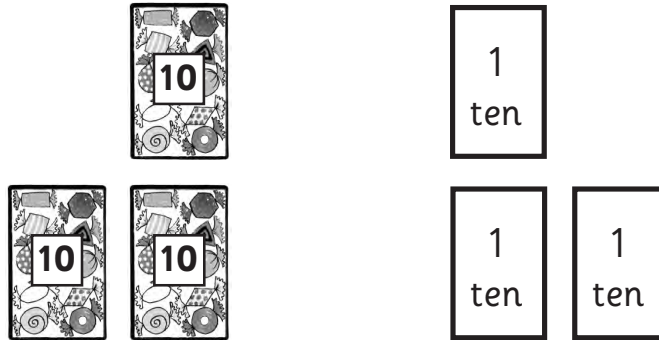
31, _____, _____, _____, _____, 81

14, _____, _____, _____, _____, 64

22, _____, _____, _____, _____, 72

Adding Tens

Look at your boxes of Sweet Counter. On one side you can see that there are **10 sweets**, but turn over, and you can see there is **1 box of ten**.



So we can say 10 or 1 ten

20 or 2 tens

30 or 3 tens

40 or _____

50 or _____

60 or

Now try these!

4 tens + 1 ten = tens and $40 + 10 =$

3 tens + 2 tens = tens and $30 + 20 =$

2 tens + 2 tens = tens and $20 + 20 =$

1 ten + 3 tens = tens and $10 + 30 =$

5 tens + 2 tens = tens and $50 + 20 =$

7 tens + 1 ten = tens and $70 + 10 =$

6 tens + 2 tens = tens and $60 + 20 =$

8 tens + 1 ten = tens and $80 + 10 =$

Taking Away Tens

$4 \text{ tens} - 1 \text{ ten} = \square \text{ tens} \quad \text{and} \quad 40 - 10 = \square$

$3 \text{ tens} - 2 \text{ tens} = \square \text{ tens} \quad \text{and} \quad 30 - 20 = \square$

$5 \text{ tens} - 2 \text{ tens} = \square \text{ tens} \quad \text{and} \quad 50 - 20 = \square$

$3 \text{ tens} - 1 \text{ ten} = \square \text{ tens} \quad \text{and} \quad 30 - 10 = \square$

$5 \text{ tens} - 2 \text{ tens} = \square \text{ tens} \quad \text{and} \quad 50 - 20 = \square$

$7 \text{ tens} - 1 \text{ ten} = \square \text{ tens} \quad \text{and} \quad 70 - 10 = \square$

$6 \text{ tens} - 2 \text{ tens} = \square \text{ tens} \quad \text{and} \quad 60 - 20 = \square$

$8 \text{ tens} - 1 \text{ ten} = \square \text{ tens} \quad \text{and} \quad 80 - 10 = \square$

Look how easy it is to take away from 100.

100 - 30 is as easy as 10 - 3 (but put the zero back on).

$100 - 20 = \square \quad 100 - 10 = \square$

$100 - 50 = \square \quad 100 - 0 = \square$

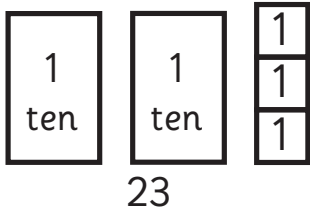
$100 - 70 = \square \quad 100 - 80 = \square$

$100 - 40 = \square \quad 100 - 30 = \square$

$100 - 60 = \square \quad 100 - 90 = \square$

Adding 1 and 10

Use your Sweet Counter to complete these.



add 1 unit

or 1 ten

Use your Sweet Counter to find out what half of these numbers is.

Add 1

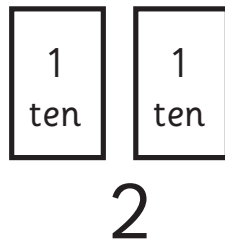
23	→	<input type="text"/>	62	→	<input type="text"/>
35	→	<input type="text"/>	74	→	<input type="text"/>
48	→	<input type="text"/>	53	→	<input type="text"/>
17	→	<input type="text"/>	61	→	<input type="text"/>
26	→	<input type="text"/>	42	→	<input type="text"/>
57	→	<input type="text"/>	28	→	<input type="text"/>

Add 1 ten

23	→	<input type="text"/>	62	→	<input type="text"/>
35	→	<input type="text"/>	74	→	<input type="text"/>
48	→	<input type="text"/>	53	→	<input type="text"/>
17	→	<input type="text"/>	61	→	<input type="text"/>
26	→	<input type="text"/>	42	→	<input type="text"/>
57	→	<input type="text"/>	28	→	<input type="text"/>

Adding 100

When you add a hundred, it is **just as easy**.



Just put 1 hundred in front!

Add 1 hundred

23	→	<input type="text"/>	62	→	<input type="text"/>
35	→	<input type="text"/>	74	→	<input type="text"/>
48	→	<input type="text"/>	53	→	<input type="text"/>
17	→	<input type="text"/>	61	→	<input type="text"/>
26	→	<input type="text"/>	42	→	<input type="text"/>

If there are already hundreds in front, then just make it 1 hundred more.

23	→	<input type="text"/>	62	→	<input type="text"/>
35	→	<input type="text"/>	74	→	<input type="text"/>
48	→	<input type="text"/>	53	→	<input type="text"/>
17	→	<input type="text"/>	61	→	<input type="text"/>
26	→	<input type="text"/>	42	→	<input type="text"/>

Adding 10 or 1 Ten

Fill in the missing numbers on the table.
Can you see the pattern down each column?

0	1			4	5		7		9
		12			15				
20			23			26			29
	31			34			37	38	
40		42			45			48	

When you add on 10, you only have to add on 1 to the tens column.
The units **will always stay the same**. Put out 24 of your Sweet Counters, and count on in tens.

Now try these:

add 10

24	
32	
25	
37	
23	
38	
22	
41	

add
1 ten

35	
27	
31	
29	
16	
8	
17	
4	

add 10

45	
72	
81	
64	
85	
44	
52	
66	

add
1 ten

51	
84	
60	
55	
42	
67	
45	
87	

Taking away 10 or 1 Ten

Fill in the missing numbers on the table.
Can you see the pattern down each column?

	1	2			5		7	8	
10				14					19
	21				25				29
		32				36			
40				44					49

When you take away 10, you only have to take away the 1 on the tens column. The units **will always stay the same**. Set out 54 of your Sweet Counters, and then keep taking away **1 ten** at a time.

Now try these:

take away 10

24	
32	
25	
37	
23	
38	
22	
41	

take away
1 ten

35	
27	
31	
29	
16	
8	
17	
4	

take away 10

45	
72	
81	
64	
85	
44	
52	
66	

take away
1 ten

51	
84	
60	
55	
42	
67	
45	
87	

Number Towers

Look how many different numbers you can make from three separate numbers!

Can you complete the columns? Can you see a pattern?

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

Put these fifteen numbers in the correct order, starting with the **smallest**.

59 759 75 5 579 975 9 597 95 957 79 57 795 7 97

Number Order

Put these in the correct order starting with the **smallest**.
Use your Sweet Counter to help you.

426	624	264	246	462	642
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
718	187	871	781	817	178
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
932	239	329	923	392	293
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
647	746	467	476	764	674
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Can you see the trick? There are always two hundreds the same, and the tens and units change place!

Now make one up of your own, but remember use only three digits each time.

If I use

I can make:

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
----------------------	----------------------	----------------------	----------------------	----------------------	----------------------

Adding and Taking Away 1, 10 and 100

How quickly can you fill in the answers.

**Add
or
Take**



1 hundred

or



1 ten

or



1 unit

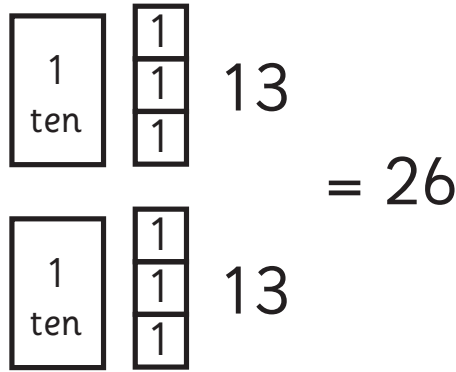
+ 1	- 1	+ 10	- 10	+ 100	- 100
23	23	38	38	87	287
41	41	74	74	66	366
37	37	26	26	17	417
19	19	38	38	29	129
26	26	54	54	44	544
17	17	32	32	182	382
25	25	55	55	127	627
48	48	48	48	121	121
15	15	11	11	234	234
8	8	9	19	435	135

Now make up some of your own!

+ 1	- 1	+ 10	- 10	+ 100	- 100

Doubles

You need to know your doubles off by heart. Everybody knows $2 + 2 = 4$. Now try to learn them up to $30 + 30$. Think of your Sweet Counter and it is easy to work out, and helps you to remember.



Now try these.

$1 + 1 = \square$	$11 + 11 = \square$	$21 + 21 = \square$
$2 + 2 = \square$	$12 + 12 = \square$	$22 + 22 = \square$
$3 + 3 = \square$	$13 + 13 = \square$	$23 + 23 = \square$
$4 + 4 = \square$	$14 + 14 = \square$	$24 + 24 = \square$
$5 + 5 = \square$	$15 + 15 = \square$	$25 + 25 = \square$
$6 + 6 = \square$	$16 + 16 = \square$	$26 + 26 = \square$
$7 + 7 = \square$	$17 + 17 = \square$	$27 + 27 = \square$
$8 + 8 = \square$	$18 + 18 = \square$	$28 + 28 = \square$
$9 + 9 = \square$	$19 + 19 = \square$	$29 + 29 = \square$
$10 + 10 = \square$	$20 + 20 = \square$	$30 + 30 = \square$

Doubling and Halving Numbers

$1 + 1 = \square$

$6 + 6 = \square$

$11 + 11 = \square$

$2 + 2 = \square$

$7 + 7 = \square$

$12 + 12 = \square$

$3 + 3 = \square$

$8 + 8 = \square$

$13 + 13 = \square$

$4 + 4 = \square$

$9 + 9 = \square$

$14 + 14 = \square$

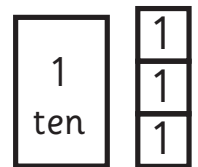
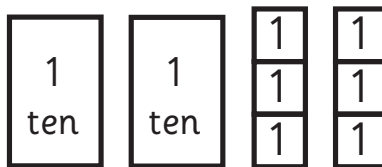
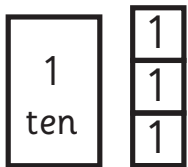
$5 + 5 = \square$

$10 + 10 = \square$

$15 + 15 = \square$

Can you see the pattern 2, 4, 6, 8, 0? They are all **even numbers** because they can be shared equally by 2.

Now look at your Sweet Counter. You can work the other way and find what **half of a number** is.



Use your Sweet Counter to find out what half of these numbers is.

$24 \longrightarrow \underline{\quad}$

$16 \longrightarrow \underline{\quad}$

$28 \longrightarrow \underline{\quad}$

$12 \longrightarrow \underline{\quad}$

$22 \longrightarrow \underline{\quad}$

$14 \longrightarrow \underline{\quad}$

$26 \longrightarrow \underline{\quad}$

$18 \longrightarrow \underline{\quad}$

$20 \longrightarrow \underline{\quad}$

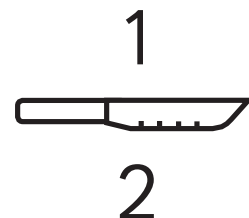
$10 \longrightarrow \underline{\quad}$

This how you write half as a number.

We say it is a fraction.

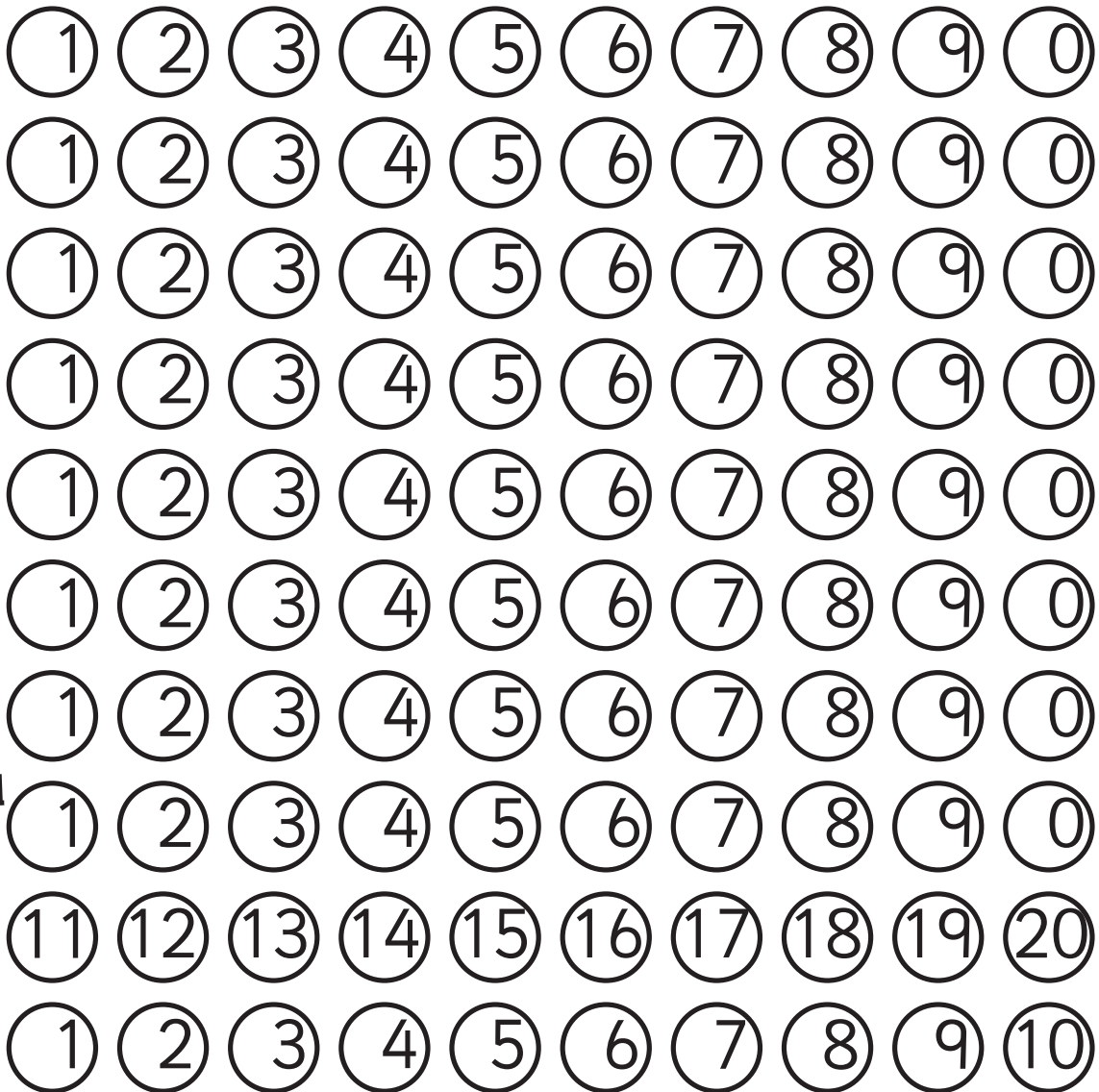
It might help you to think of 1 cut into 2 with a knife!

Practise writing $\frac{1}{2}$ as a fraction.



A Jar full of Units

Look at the numbers on the jar. Only the **units** have been filled in!
Complete by filling in the tens.



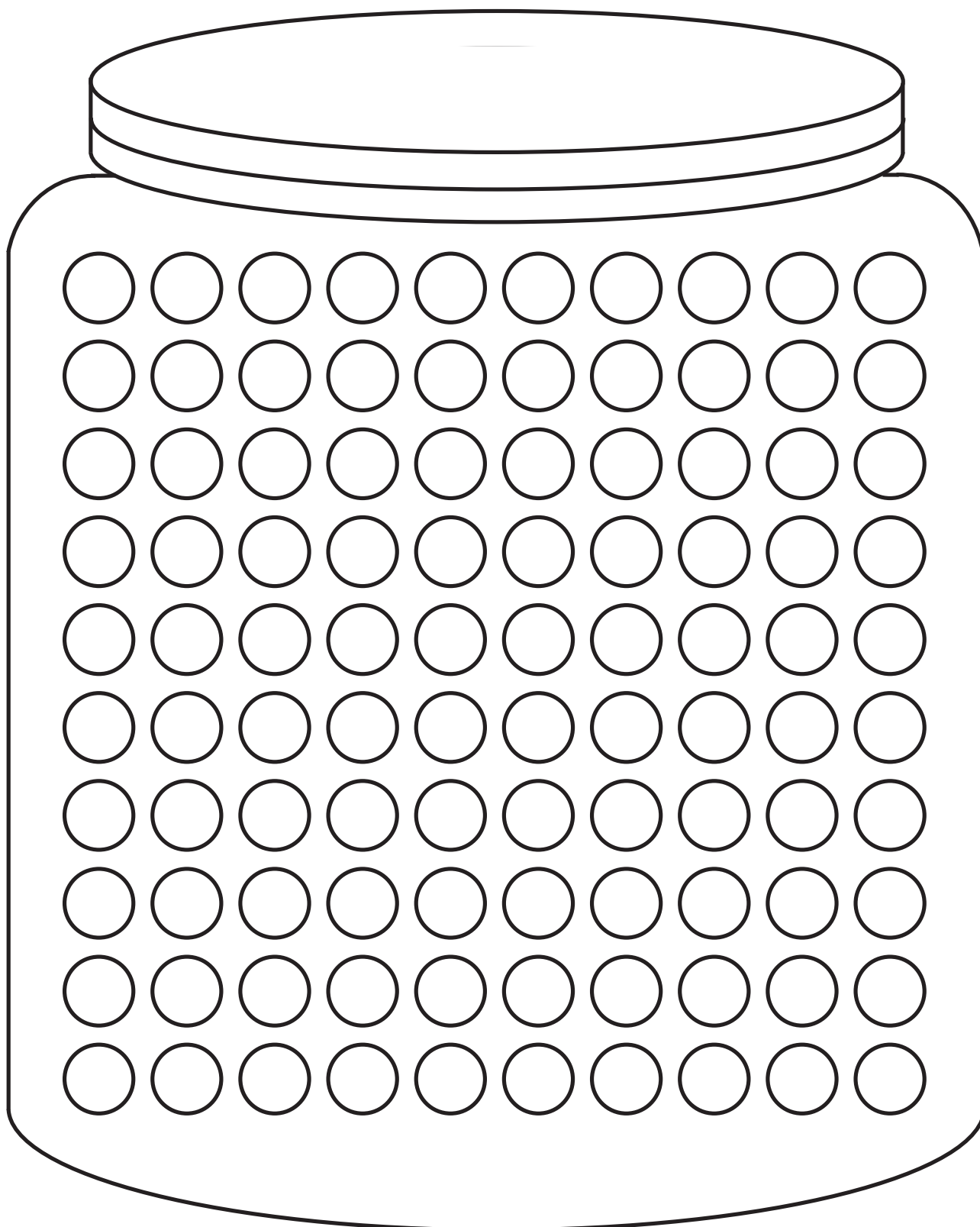
A Jar full of Tens

Look at the numbers on the jar. Only the **tens** have been filled in!
Complete by filling in the units.

9	9	9	9	9	9	9	9	9	10
8	8	8	8	8	8	8	8	8	9
7	7	7	7	7	7	7	7	7	8
6	6	6	6	6	6	6	6	6	7
5	5	5	5	5	5	5	5	5	6
4	4	4	4	4	4	4	4	4	5
3	3	3	3	3	3	3	3	3	4
21	22	2	2	2	2	2	2	2	3
11	12	13	14	15	16	17	18	19	20
1	2	3	4	5	6	7	8	9	10

A Hundred Jar

Find different ways to fill in the 100 jar!



Empty Sweet Jar

Can you draw 100 sweets in the jar? How are you going to set them out, so that you do not lose count? Make the sweets simple shapes, and colour them so they are easy to count.



Patterns

Look at the pattern and complete.

$1 + 1 = \square$

$10 + 10 = \square$

$100 + 100 = \square$

$3 + 3 = \square$

$30 + 30 = \square$

$300 + 300 = \square$

$5 + 5 = \square$

$50 + 50 = \square$

$500 + 500 = \square$

$7 + 7 = \square$

$70 + 70 = \square$

$700 + 700 = \square$

$9 + 9 = \square$

$90 + 90 = \square$

$900 + 900 = \square$

$2 + 2 = \square$

$20 + 20 = \square$

$200 + 200 = \square$

$4 + 4 = \square$

$40 + 40 = \square$

$400 + 400 = \square$

$6 + 6 = \square$

$60 + 60 = \square$

$600 + 600 = \square$

$8 + 8 = \square$

$80 + 80 = \square$

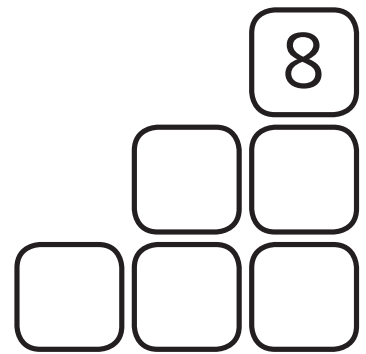
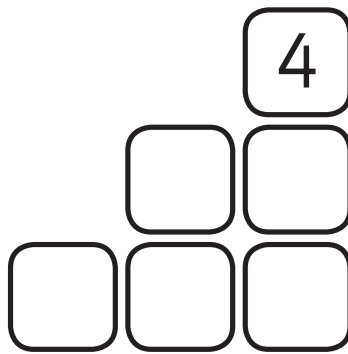
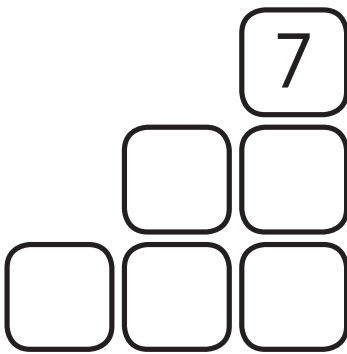
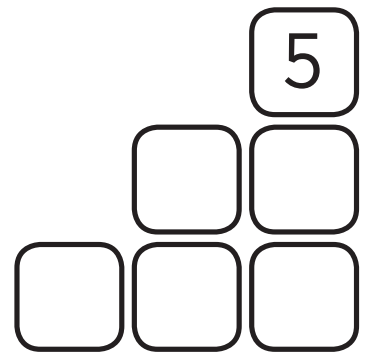
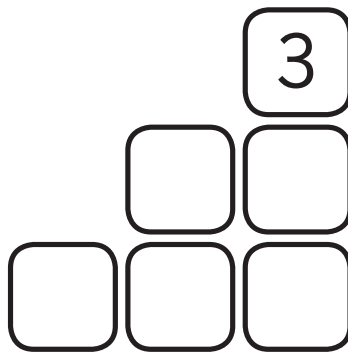
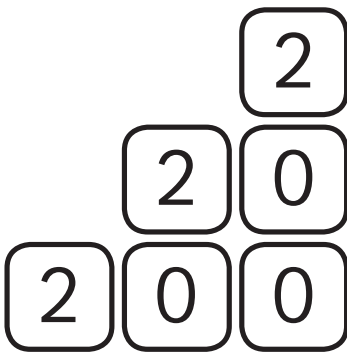
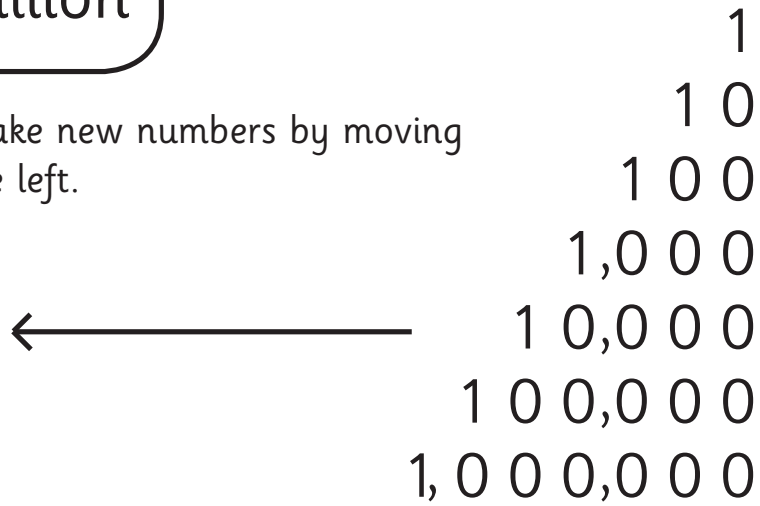
$800 + 800 = \square$

Well done!

I took _____ minutes to finish

1 to a Million

In maths we make new numbers by moving the digits to the left.



Now try with out boxes to help you.

6

9

Look for the Pattern

Add 1 ten to 3, 6 and 9.

3	6	9
13	6	9
23	6	9
33	6	9
3	6	
3	6	
3	6	
3	6	
3		
3		
3		
3		
3		
3		
3		
3		
3		
3		

Be careful after 9 tens. The pattern will keep going 9, 10, 11, 12, 13, 14, 15.

Adding 11

This is so easy! Add 1 ten and 1 unit to each column.

34

11

41

23

53

45

22

56

67

78

89

When you get to a 9 it will always be 0 next and there will be 2 extra tens.

29

49

69

59

89

40

19

39

79

99

109

Over a hundred? Do not fear - patterns are here!

Adding 9 and 99

Add 9

Add on 10 and take away 1.

$75 \longrightarrow \square$

$20 \longrightarrow \square$

$12 \longrightarrow \square$

$23 \longrightarrow \square$

$66 \longrightarrow \square$

$7 \longrightarrow \square$

$56 \longrightarrow \square$

$81 \longrightarrow \square$

$79 \longrightarrow \square$

$44 \longrightarrow \square$

$3 \longrightarrow \square$

$38 \longrightarrow \square$

$10 \longrightarrow \square$

$83 \longrightarrow \square$

Add 99

Add on 100 and take away 1.

$33 \longrightarrow \square$

$29 \longrightarrow \square$

$65 \longrightarrow \square$

$15 \longrightarrow \square$

$11 \longrightarrow \square$

$21 \longrightarrow \square$

$6 \longrightarrow \square$

$4 \longrightarrow \square$

$57 \longrightarrow \square$

$2 \longrightarrow \square$

$23 \longrightarrow \square$

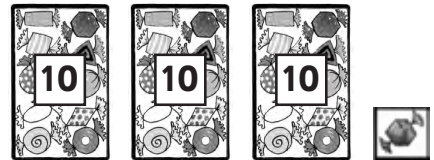
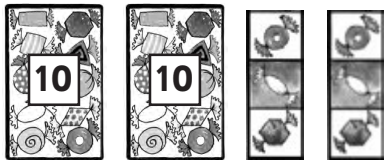
$97 \longrightarrow \square$

$72 \longrightarrow \square$

$41 \longrightarrow \square$

Horizontal Addition made Easy Peasy!

Lay out your Counter cards for each sum.
Add the **tens** and then the **units**.



$$26 + 31 =$$

$42 + 25 = \square$

$36 + 42 = \square$

$63 + 14 = \square$

$72 + 21 = \square$

$53 + 23 = \square$

$24 + 15 = \square$

$27 + 41 = \square$

$52 + 35 = \square$

$82 + 11 = \square$

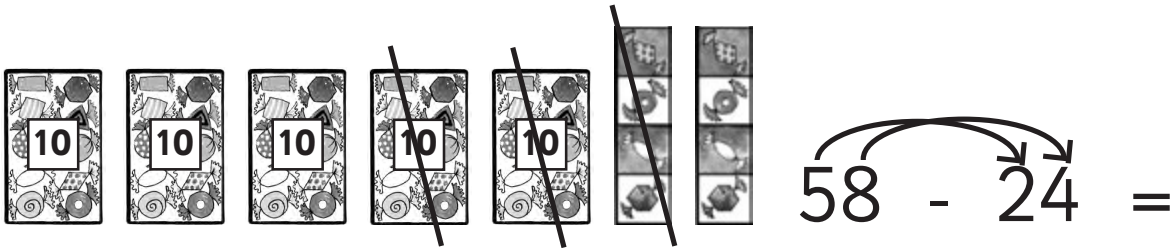
$43 + 42 = \square$

$39 + 20 = \square$

$16 + 63 = \square$

Horizontal Subtraction made Easy Peasy

Lay out your Counter cards for each sum.
Subtract the **tens** and then the **unit**.



$68 - 15 = \square$

$76 - 32 = \square$

$56 - 22 = \square$

$83 - 51 = \square$

$73 - 11 = \square$

$35 - 14 = \square$

$29 - 14 = \square$

$88 - 56 = \square$

$56 - 23 = \square$

$95 - 54 = \square$

$77 - 53 = \square$

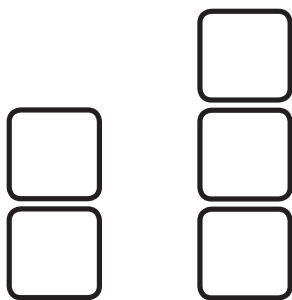
$49 - 18 = \square$

$63 - 41 = \square$

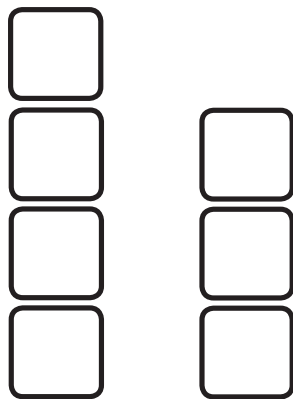
$28 - 16 = \square$

More Sweets

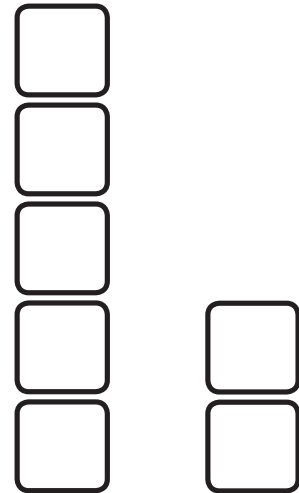
Use your Counter units as joined units to make towers and compare numbers. Draw a sweet in each box. Draw link lines to show the same number of sweets.



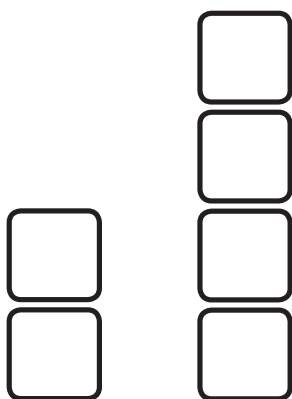
3 is ___ more
than 2



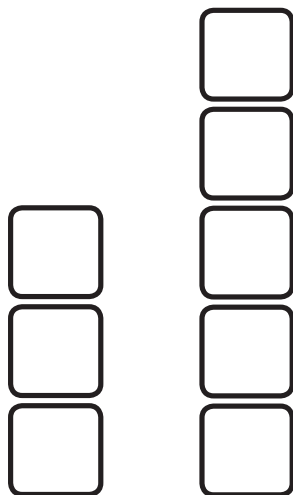
4 is ___ more
than 3



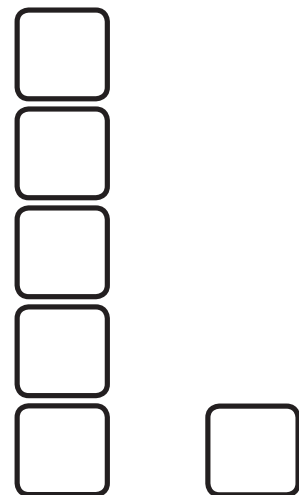
5 is ___ more
than 2



4 is ___ more
than 2



5 is ___ more
than 3



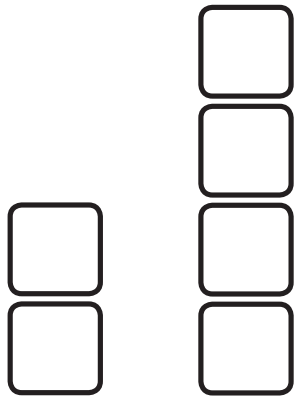
5 is ___ more
than 1

Turn over and draw some more towers.
Draw link lines to show which tower has more.

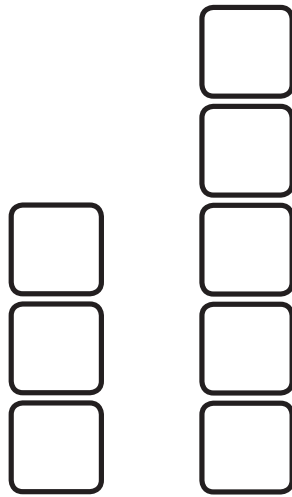
Not as Many Sweets

Use your Counter units to make towers and compare numbers.

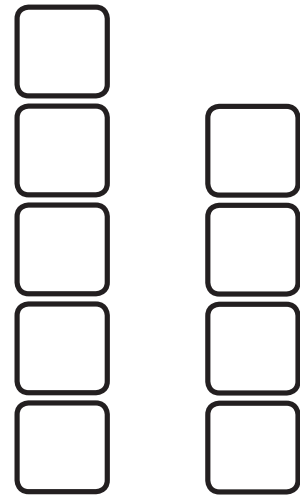
Draw sweets in each box. Draw link lines to show the **same** number of sweets.



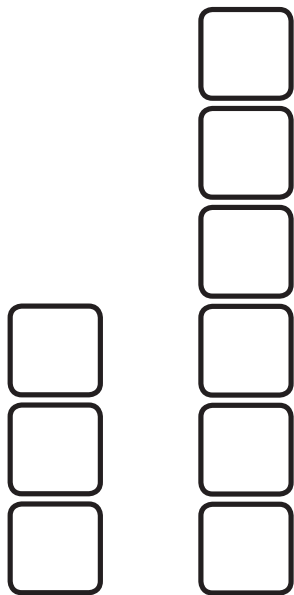
2 is ___ fewer
than 4



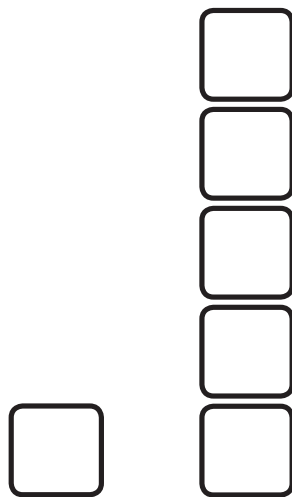
3 is ___ fewer
than 5



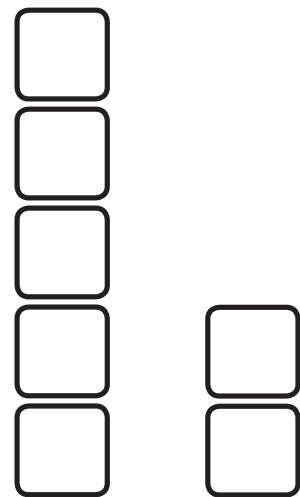
4 is ___ fewer
than 5



3 is ___ fewer
than 6



1 is ___ fewer
than 5



2 is ___ fewer
than 5

Turn over and draw some more towers.

Draw link lines to show which tower has fewer.

Teacher's Notes

Contents and Description

- 20 x hundred jars
- 40 x tens
- 200 units in strips of 10
- Photocopiable worksheets and teacher notes

The Sweet Counter place value cards provide a new approach to the teaching of place value. Using images of jars, boxes and individual sweets to represent hundreds, tens and units, children are able to see the value of hundreds, tens and units at a glance. The colourful, laminated sweet jars are clearly marked with 100 and the boxes with 10. The reverse side shows the 100 as 1 hundred, the 10 as 1 ten and the unit as 1. The individual sweets are in strips of ten and can be cut into individual or joined units. It is suggested that the units are not all cut into individual units but as 1's, 2's, 3's, 4's and 5's so any number combination can be made and held with ease e.g. $5 + 4 = 9$.

- Using the 'currency' of sweets, the concept of place value is displayed at a glance.
- High numbers can be held in small hands
- Adapts to any maths scheme
- Ideal for special needs
- Counting in 2's, 5's and 10's
- Ideal for number bonds, more and less/fewer and counting on
- Photocopiable worksheets provide activities to support learning
- Portable and easily stored

Value

Which digit is worth the most in 138? The majority of children will instantly think that the 8 is worth the most, yet when children are familiar with the Sweet Counter cards, it will be obvious that the 1 is worth the most. Children with limited mathematical concepts will know if somebody has more sweets than them, as sweets are their 'currency' and 'unit of value'.

Mental Maths

Place Value underpins the whole of our mathematical system. The cards provide a relevant visual image which allows children to 'visualise' and tackle operations and strategies such as adding and subtracting 1, 10, 100, 1000, 111, 9, 99 and later a good understanding of decimal value.

How Many Tens in - ?

Although this may seem very easy, many children find it difficult to relate to 20 being 2 tens or 50 being 5 tens. The Sweet Counter cards are easily counted 10, 20, 30, 40, 50 etc. but at any time these can be turned over to show 1, 2, 3, 4, 5, tens on the reverse side. Thus holding 3 tens and 4 ones, it is easy to see that there are 3 tens in 34.

Counting in Tens

Counting in tens is easy to memorise if on the ten e.g. 10, 20, 30. More difficulty is found when children have to start at 3 or 6 and count in tens, particularly where it changes from 3 to 13, and 6 to 16. With Sweet Counter cards, the visual image is clearly displayed so that only the ten is being added and the units remain constant.

Making 10 More

Following lots of experience in counting in tens, children should be able to add on 10 to any number by automatically making the tens column 1 ten more. Be vigilant for the child who is able to complete this operation by counting on ten, as they have not yet seen the concept of place value. 38

Teacher's Notes Continued

Making 10 Fewer

Once confident in adding 10 or 1 ten automatically, children will be able to tackle subtracting 10 or 1 ten from a given number by decreasing the tens column. Hundreds

Using the Sweet Counter cards, children soon become familiar with high numbers and realise that adding or subtracting 100 is merely adding or subtracting 1 (hundred) from the correct column.

Horizontal Addition and Subtraction

When tackling horizontal addition or subtraction, full understanding of place value is essential in order to manipulate the columns. The place value cards enable the columns of the sum to be displayed practically and visually so that confidence may be achieved, This is particularly important when dealing with sums such as 142 and 31, knowing that the 4 has the same value as the 3.

Adding and Subtracting 9, 99, 111

The cards are easily used to show these mental strategies and 'compensation' can be introduced in a practical way. E.g. if adding 99, it takes a great deal of time to count out 9 tens and 9 units, yet add and hundred and compensate by returning 1 is quickly completed.

Decomposition

When formal written methods such as 'decomposition' are explained the place value cards are able to demonstrate why a ten or a hundred needs to be exchanged.

Patterns

Place Value work leads to a great deal of pattern work. Adding 1 or 1 ten will lead to different patterns which when using the Sweet Counter cards are easy to see.

Further Concepts Taught with the Sweet Counter Cards

Number Bonds to 10

Before the joined units are all cut into 1's, 2's, 3's, 4's and 5's for place value work, some of the strips of 10 are ideal for number bond work. Thus they might be cut as (9,1) (8,2) (7,3) (6,4) and (5,5).

Further Number Bonds

The joined units can be used for any number bond combinations.

Counting On

Starting with a 10 – 1 ten and 0 units, one can put ten in the head and count on to make 11, 12, 13 etc.

Counting in 2's, 3's, 4's and 5's

The joined units are practical counters to enable counting in groups. For ease of handling, joined units can be held together with a split pin and then fanned out. Labels can be added to the top of each 'tower' to enable counting and ordering.

More and Less/Fewer

The joined units prove ideal counters to use in number comparison. Again the currency of sweets make ideal counters to compare numbers. E.g. Jake has 5 sweets and Natasha has 3. How many more sweets does Jake have than Natasha?