

Math Review Task

Grade 3

Addition and Subtraction:

Addition mental strategies – look for a ten

1 Let's warm up with some addition grids.

a

+	2	3	0
6	8	9	6
17	19	20	17
13	15	16	13
12	14	15	12

b

+	3	0	2
9	12	9	11
16	19	16	18
11	14	11	13
14	17	14	16

c

+	2	3	0
7	9	10	7
13	15	16	13
8	10	11	8
5	7	8	5

2 Adding more than two numbers together is easier if we look for a ten. Circle the numbers that add to 10 first, then add what is left:

a $\boxed{6} + 3 + \boxed{4} = 13$

b $\boxed{1} + 5 + 5 = 11$

c $\boxed{9} + 5 + 1 = 15$

d $\boxed{7} + 6 + 3 = 16$

e $\boxed{5} + 6 + 4 = 15$

f $\boxed{2} + 1 + 8 = 11$

3 Loop the numbers that make 10. Look for sets going across and down. One set has been looped for you. How many more can you find?

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

Some numbers may be in more than one set.



DISCOVER

4 Look for a ten and change the order of the numbers in each addition problem to make it faster to add.

a $4 + 5 + 3 + 5 + 6$

b $9 + 3 + 7 + 1 + 5$

$4 + 6 + 5 + 5 + 3 = 23$

$9 + 1 + 3 + 7 + 5 = 25$

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Addition and Subtraction:

Addition mental strategies – look for patterns

Number patterns are useful. You can build on basic addition facts.

1 Add 10 each time:

a

10	20	30	40
----	----	----	----

b

15	25	35	45
----	----	----	----

c

7	17	27	37
---	----	----	----

2 Add 100 each time:

a

10	110	210	310
----	-----	-----	-----

b

15	115	215	315
----	-----	-----	-----

c

7	107	207	307
---	-----	-----	-----

3 Use patterns to complete this addition table:

a

$3 + 5 =$	8	$30 + 50 =$	80	$300 + 500 =$	800
-----------	---	-------------	----	---------------	-----

b

$6 + 2 =$	8	$60 + 20 =$	80	$600 + 200 =$	800
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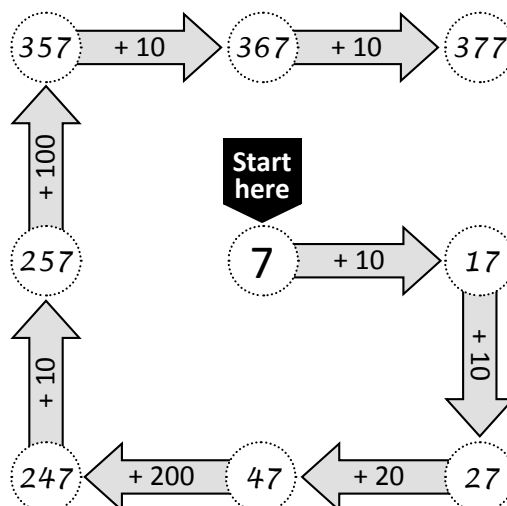
c

$4 + 1 =$	5	$40 + 10 =$	50	$400 + 100 =$	500
-----------	---	-------------	----	---------------	-----

d

$7 + 3 =$	10	$70 + 30 =$	100	$700 + 300 =$	1,000
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4 Complete this addition trail:



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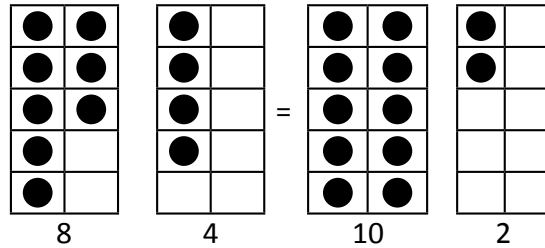
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Addition and Subtraction:

Addition mental strategies – bridge to ten

Bridge to ten is when we make the first number up to 10 and then add what is left.

Let's start by using ten frames:



$$8 + 4 = 10 + 2 = 12$$

- 1 Look carefully at the first set of ten frames. Bridge to ten on the second set and complete the addition.

a

$$8 + 6 = 10 + \boxed{4} = \boxed{14}$$

b

$$7 + 4 = 10 + \boxed{1} = \boxed{11}$$

c

$$9 + 5 = 10 + \boxed{4} = \boxed{14}$$

d

$$9 + 8 = 10 + \boxed{7} = \boxed{17}$$

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Addition and Subtraction:

Addition mental strategies – split strategy version 1

When adding large numbers in our heads, it can be easier to split one of the numbers into parts and add each part separately.

$$57 + 46 \begin{cases} 40 \\ 6 \end{cases} \longrightarrow 57 + 40 = 97 \longrightarrow 97 + 6 = 103$$

- 1 Practice separating these numbers into tens and ones. The first one has been done for you.

a $22 \begin{cases} 20 \\ 2 \end{cases}$

b $57 \begin{cases} 50 \\ 7 \end{cases}$

c $65 \begin{cases} 60 \\ 5 \end{cases}$

d $96 \begin{cases} 90 \\ 6 \end{cases}$

- 2 Practice adding tens to these numbers:

+	10	50	20	30	60
21	31	71	41	51	81
48	58	98	68	78	108

- 3 Use the split strategy with these problems:

a $38 + 34 \begin{cases} 30 \\ 4 \end{cases} \longrightarrow 38 + 30 = 68 \longrightarrow 68 + 4 = 72$

b $29 + 28 \begin{cases} 20 \\ 8 \end{cases} \longrightarrow 29 + 20 = 49 \longrightarrow 49 + 8 = 57$

c $75 + 14 \begin{cases} 10 \\ 4 \end{cases} \longrightarrow 75 + 10 = 85 \longrightarrow 85 + 4 = 89$

d $94 + 17 \begin{cases} 10 \\ 7 \end{cases} \longrightarrow 94 + 10 = 104 \longrightarrow 104 + 7 = 111$

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Addition and Subtraction:

Subtraction mental strategies – related facts

Knowing one addition fact means you also know two related subtraction facts.
Because $7 + 3 = 10$ you also know that $10 - 7 = 3$ and $10 - 3 = 7$

- 1 Show the related addition and subtraction facts for each set of digits. The first one is partially completed for you.

a

8	4	12		
8	+	4	=	12
4	+	8	=	12
12	-	4	=	8
12	-	8	=	4

b

7	9	16		
7	+	9	=	16
9	+	7	=	16
16	-	7	=	9
16	-	9	=	7

c

13	7	20		
13	+	7	=	20
7	+	13	=	20
20	-	13	=	7
20	-	7	=	13

d

10	8	18		
10	+	8	=	18
8	+	10	=	18
18	-	10	=	8
18	-	8	=	10

- 2 Ring a section of the dots in each box and write a related number sentence for each. The first one is partially done for you.

a

Answers will vary.

8	+	11	=	19
---	---	----	---	----

b

	+		=	18
--	---	--	---	----

c

	+		=	16
--	---	--	---	----

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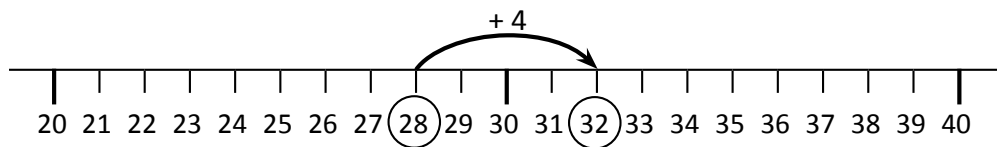
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Addition and Subtraction:

Subtraction mental strategies – counting up

If there is only a small difference between the numbers, use counting up to find the difference. See: $32 - 28 = \boxed{?}$

Think: What can you add to 28 to get 32? Count up by 4.



1 Find the difference between these by counting up.

a $32 - 29 = \boxed{3}$

b $33 - 28 = \boxed{5}$

c $34 - 27 = \boxed{7}$

d $71 - 68 = \boxed{3}$

e $82 - 76 = \boxed{6}$

f $73 - 69 = \boxed{4}$

g $83 - 77 = \boxed{6}$

h $112 - 109 = \boxed{3}$

i $201 - 196 = \boxed{5}$

2 Use counting up to complete these function machines.

a

In	Rule	Out
41	-37	4
44		7
42		5
45		8

b

In	Rule	Out
71	-68	3
73		5
75		7
72		4

With function machines, numbers go in, have the rule applied and then come out.



REMEMBER

c

In	Rule	Out
122	-119	3
125		6
124		5
123		4

d

In	Rule	Out
101	-98	3
105		7
107		9
103		5

e

In	Rule	Out
96	-89	7
93		4
92		3
94		5

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Addition and Subtraction:

Subtraction mental strategies – the split strategy

The split strategy is where we make the subtraction easy by splitting the second number into tens and ones. We then subtract each part separately.

$$68 - 22 \begin{cases} 20 \\ 2 \end{cases} \rightarrow 68 - 20 = 48 \rightarrow 48 - 2 = 46$$

1 Practice subtracting tens from these numbers:

-	10	30	20	50
96	86	66	76	46
71	61	41	51	21

2 Use the split strategy with these problems:

a $73 - 34 \begin{cases} 30 \\ 4 \end{cases} \rightarrow 73 - 30 = 43 \rightarrow 43 - 4 = 39$

b $96 - 65 \begin{cases} 60 \\ 5 \end{cases} \rightarrow 96 - 60 = 36 \rightarrow 36 - 5 = 31$

c $81 - 24 \begin{cases} 20 \\ 4 \end{cases} \rightarrow 81 - 20 = 61 \rightarrow 61 - 4 = 57$

d $69 - 23 \begin{cases} 20 \\ 3 \end{cases} \rightarrow 69 - 20 = 49 \rightarrow 49 - 3 = 46$

e $106 - 43 \begin{cases} 40 \\ 3 \end{cases} \rightarrow 106 - 40 = 66 \rightarrow 66 - 3 = 63$

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Addition and Subtraction:

Written methods – addition to 99, no regrouping

Using a written method to add is very similar to this version of the split strategy:

$$\begin{aligned} 42 + 31 &= (4 \text{ tens} + 3 \text{ tens}) + (2 \text{ ones} + 1 \text{ one}) \\ &= 7 \text{ tens} + 3 \text{ ones} \\ &= 73 \end{aligned}$$

The difference is that we set the numbers up in place value columns and add the ones first.

	tens	ones
	4	2
+	3	1
	7	3

1 For each addition, complete it with the split strategy and then use the written method.

$$\begin{aligned} \text{a } 55 + 23 &= \left(\begin{array}{|c|} \hline 5 \\ \hline \text{tens} \end{array} + \begin{array}{|c|} \hline 2 \\ \hline \text{tens} \end{array} \right) + \left(\begin{array}{|c|} \hline 5 \\ \hline \text{ones} \end{array} + \begin{array}{|c|} \hline 3 \\ \hline \text{ones} \end{array} \right) \\ &= \begin{array}{|c|} \hline 7 \\ \hline \text{tens} \end{array} + \begin{array}{|c|} \hline 8 \\ \hline \text{ones} \end{array} \\ &= \boxed{78} \end{aligned}$$

	tens	ones
	5	5
+	2	3
	7	8

$$\begin{aligned} \text{b } 42 + 35 &= \left(\begin{array}{|c|} \hline 4 \\ \hline \text{tens} \end{array} + \begin{array}{|c|} \hline 3 \\ \hline \text{tens} \end{array} \right) + \left(\begin{array}{|c|} \hline 2 \\ \hline \text{ones} \end{array} + \begin{array}{|c|} \hline 5 \\ \hline \text{ones} \end{array} \right) \\ &= \begin{array}{|c|} \hline 7 \\ \hline \text{tens} \end{array} + \begin{array}{|c|} \hline 7 \\ \hline \text{ones} \end{array} \\ &= \boxed{77} \end{aligned}$$

	tens	ones
	4	2
+	3	5
	7	7

$$\begin{aligned} \text{c } 61 + 18 &= \left(\begin{array}{|c|} \hline 6 \\ \hline \text{tens} \end{array} + \begin{array}{|c|} \hline 1 \\ \hline \text{tens} \end{array} \right) + \left(\begin{array}{|c|} \hline 1 \\ \hline \text{ones} \end{array} + \begin{array}{|c|} \hline 8 \\ \hline \text{ones} \end{array} \right) \\ &= \begin{array}{|c|} \hline 7 \\ \hline \text{tens} \end{array} + \begin{array}{|c|} \hline 9 \\ \hline \text{ones} \end{array} \\ &= \boxed{79} \end{aligned}$$

	tens	ones
	6	1
+	1	8
	7	9

$$\begin{aligned} \text{d } 65 + 32 &= \left(\begin{array}{|c|} \hline 6 \\ \hline \text{tens} \end{array} + \begin{array}{|c|} \hline 3 \\ \hline \text{tens} \end{array} \right) + \left(\begin{array}{|c|} \hline 5 \\ \hline \text{ones} \end{array} + \begin{array}{|c|} \hline 2 \\ \hline \text{ones} \end{array} \right) \\ &= \begin{array}{|c|} \hline 9 \\ \hline \text{tens} \end{array} + \begin{array}{|c|} \hline 7 \\ \hline \text{ones} \end{array} \\ &= \boxed{97} \end{aligned}$$

	tens	ones
	6	5
+	3	2
	9	7

Math Review Task

Grade 3

Mathletics

Addition and Subtraction:

Written methods – addition to 99, no regrouping

- 2 Add these using the written method. Add the ones, then the tens. Write your answer neatly in line with the place value columns.

a

	tens	ones
	4	3
+	3	2
	7	5

b

	tens	ones
	1	0
+	4	9
	5	9

c

	tens	ones
	3	6
+	5	2
	8	8

d

	tens	ones
	6	4
+		5
	6	9

e

	tens	ones
	3	3
+	1	4
	4	7

f

	tens	ones
	9	2
+		6
	9	8

- 3 Now try adding three 2 digit numbers using the written method:

a

	tens	ones
	3	0
	2	1
+	2	6
	7	7

b

	tens	ones
	3	4
	4	1
+	2	3
	9	8

c

	tens	ones
	2	3
	3	5
+	3	0
	8	8

- 4 Write the missing digits in these problems:

a

	tens	ones
	2	3
	3	2
+	4	1
	9	6

b

	tens	ones
	4	3
	2	3
+	1	2
	7	8

c

	tens	ones
	2	1
	3	2
+	4	5
	9	8

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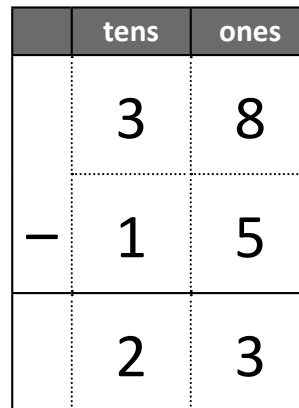
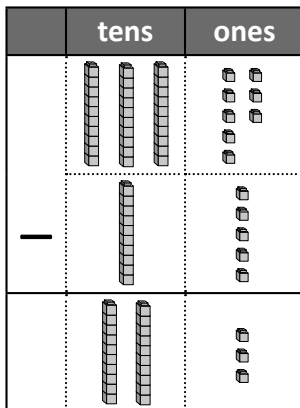
Grade 3

Mathletics

Addition and Subtraction:

Written methods – subtraction to 99, no regrouping

Here is the written method for subtraction. The longs and shorts show you the place value. But you actually use digits.



- 1 Subtract these using the written method. Subtract the ones, then the tens. Write your answer neatly in line with the place value columns:

a

	tens	ones
	6	3
–	3	2
	3	1

b

	tens	ones
	8	7
–	4	3
	4	4

c

	tens	ones
	7	7
–	5	3
	2	4

d

	tens	ones
	5	8
–	4	2
	1	6

e

	tens	ones
	7	8
–	3	2
	4	6

f

	tens	ones
	6	8
–	3	5
	3	3

g

	tens	ones
	6	7
–	1	2
	5	5

h

	tens	ones
	3	4
–	1	3
	2	1

i

	tens	ones
	9	7
–	2	6
	7	1

Math Review Task

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Addition and Subtraction:

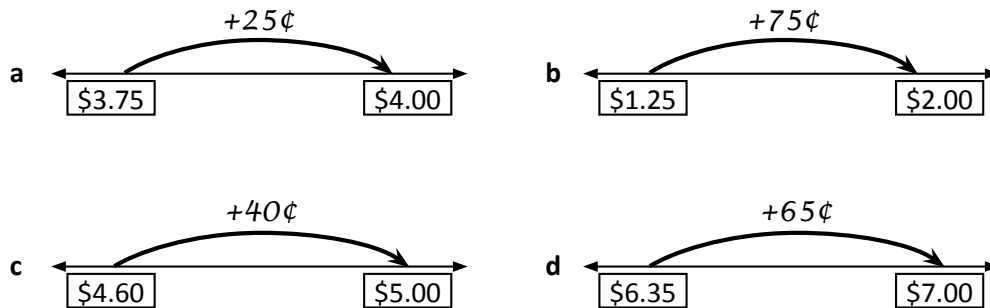
Money – finding change

When you buy something and you don't have the exact combination of bills and coins, you can pay with a larger amount and get the difference back. This is called change.

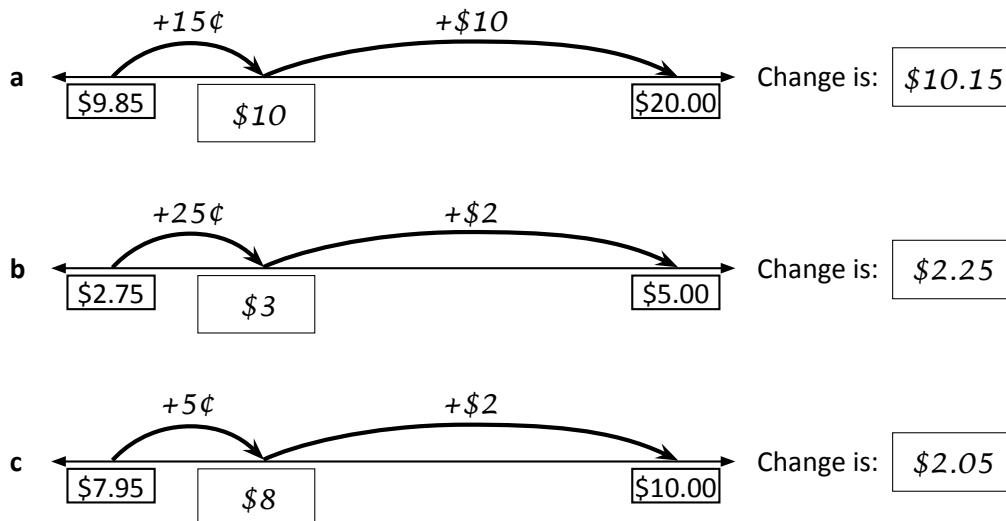
For example, if I buy some fruit that costs \$2.85 with a \$5.00 bill, I would get back \$2.15 in change. Bridge to the next dollar and then add the rest.



1 Practice bridging to the next dollar:



2 Bridge to the next dollar on these number lines to find the change:



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Chance and Data:

Chance – coin investigation

When you toss a coin, you call out heads or tails. There are two sides and two different possible results. That means there is an equal chance of landing on heads as there is on tails.



Tails



Heads

- 1** For this experiment, you will toss a coin 20 times and record your results. First, predict your results:

a How many times do you think the coin will land on heads? Answers will vary.

b How many times do you think the coin will land on tails? _____

- c Now toss a coin 20 times and record your results below. Write H for heads and T for tails.

○	○	○	○	○	○	○	○	○	○	○
○	○	○	○	○	○	○	○	○	○	○

- 2** Repeat the above experiment.

a Toss a coin 20 times and record your results: *Answers will vary.*

○	○	○	○	○	○	○	○	○	○	○
○	○	○	○	○	○	○	○	○	○	○

- b What happened? Fill in this table to show the results.

Number of times the coin landed on heads and tails		
	H	T
Experiment 1		
Experiment 2		

- c If your results changed, why do you think this is?

Math Review Task

Grade 3

Chance and Data:

Data – collecting data

The tally method is where we count in 5s. We put a stroke for each number and the fifth stroke is a line that goes diagonally through the set of 4.



However, we don't write down the numbers, we just use strokes like this:



4 Count these tallies and write the total in the box at the end:



25



28

5 Josie collected some data on favorite colors in her class.

a Show Josie how to represent this data using tallies:

Favorite colors in 4B	
Red	
Blue	
Green	
Yellow	

Favorite colors in 4B	
Red	
Blue	
Green	
Yellow	

b How many children are in 4B?

c Why do you think tallies are a good way of collecting data?

It makes it easy to count because they are in groups of 5.

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Chance and Data:

Data – bar graphs

Bar graphs are a clear way of showing data. There is a vertical line that has numbers, and is called the scale. The horizontal line has the different categories that are being counted. There should always be a heading at the top so it's easy to see what the data is about.

1 Answer the questions about the data shown on this bar graph.

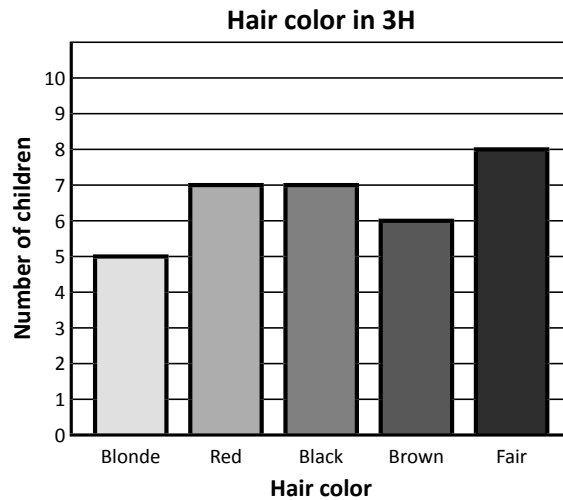
a How many children have brown hair? 6

b Which color hair do the smallest group of children have?

Blonde

c Which color hair do most children have?

Fair

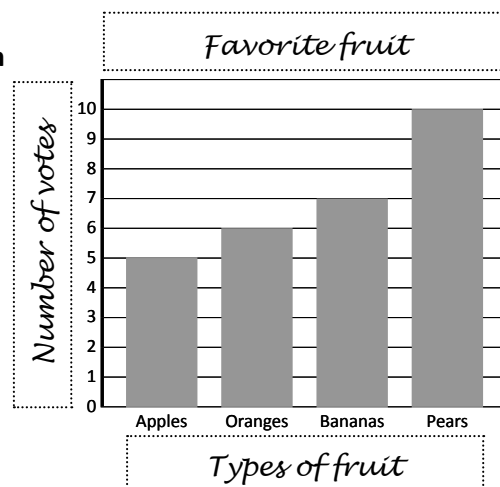


d What do you notice about the number of children who have either red or black hair?

The same number of children have red and black hair.

2 A group of people were surveyed about their favorite fruit. Make a bar graph from the data collected in the table. First write the number of tallies in the table:

Favorite fruit		
Apples		5
Oranges		6
Bananas		7
Pears		10



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Chance and Data:

Data – bar graphs

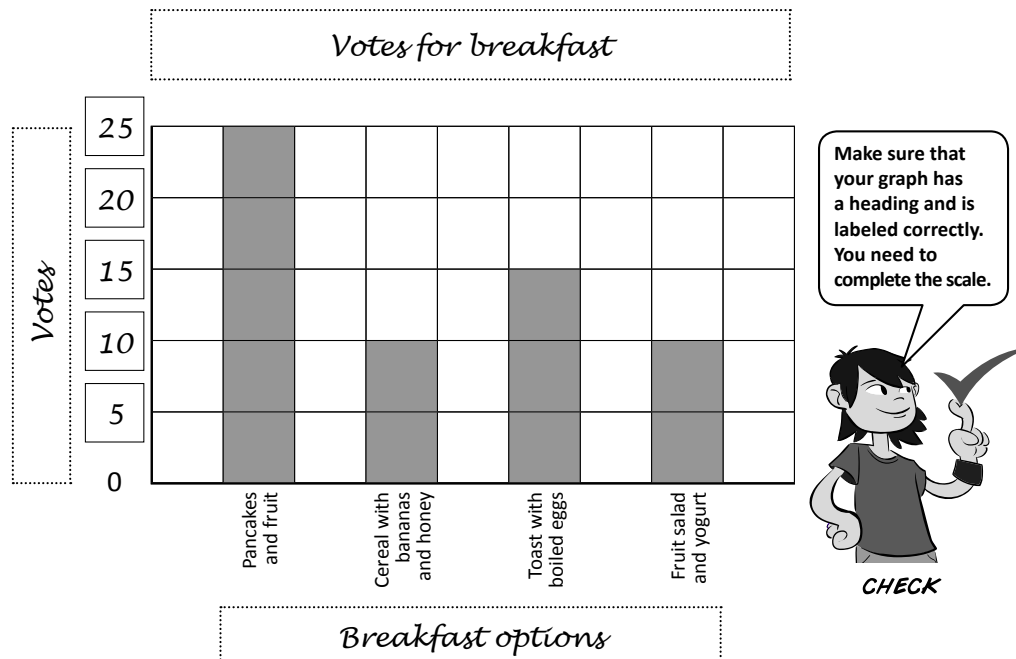
- 3 3L were planning a healthy breakfast morning. They conducted a survey to find out the most popular option. The data they collected is shown in the table below:

Breakfast options	Votes	Number of votes
Pancakes and fruit		25
Cereal with bananas and honey		10
Toast with boiled eggs		15
Fruit salad and yogurt		10

- a What question did they ask?

Which of these four options would you like for the healthy breakfast morning?

- b Work out the number of students from the tallies. Write this number in the last column in the table above.
- c Show this data on the bar graph below:



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Chance and Data:

Data – two-way tables

A two-way table can show a lot of information in a small space. Look at this two-way table about pets:

	Has a cat	Doesn't have a cat
Has a dog	Cam Ellie	Zoe
Doesn't have a dog	Tim	Sara Nick

Cam and Ellie both have a dog and a cat.



1 Answer questions about the two-way table above.

- a How many kids have a cat? 3
- b Name 2 kids who have neither a cat or a dog. Sara and Nick
- c What pet does Tim have? A cat

2 Lee had a costume party where her guests had to wear a hat, glasses or both. Sort this data by writing the names into the two-way table below:

- Yvette found a hat in her dressing-up box.
- Simon wore his brother's hat and glasses.
- Ben bought a pair of fake glasses.
- Lee wore her beach hat and sunglasses.
- Arki just wore a large floppy hat.
- Mel lost her cowboy hat and sunglasses on the way to the party so ended up with neither.

	Glasses	No glasses
Hat	Lee Simon	Arki Yvette
No hat	Ben	Mel

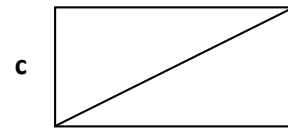
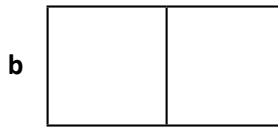
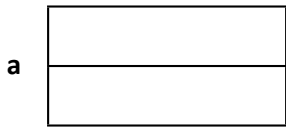
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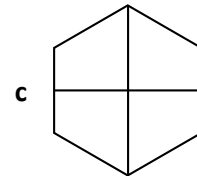
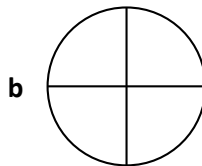
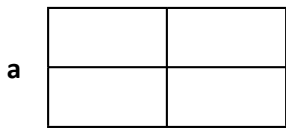
Chance and Data:

Introducing fractions – modeling fractions

1 Show one half in a different way on each rectangle:

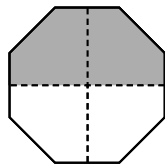


2 Show how each shape can be divided into quarters:

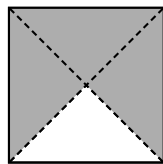


3 Color the fractions of each shape:

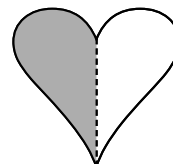
a two quarters



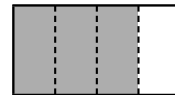
b three quarters



c one half



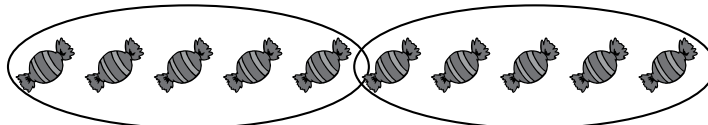
d three quarters



4 Answer these sharing problems. Draw a picture to match:

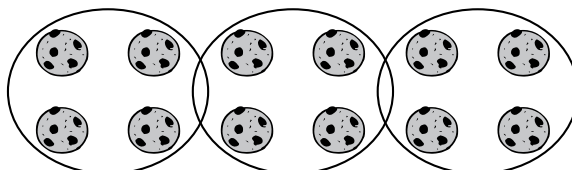
a I have 10 candies and I have to share them with my brother.
How many do we each get?

out of



b There are 12 cookies to be shared among 3 people.
How many does each person get?

out of



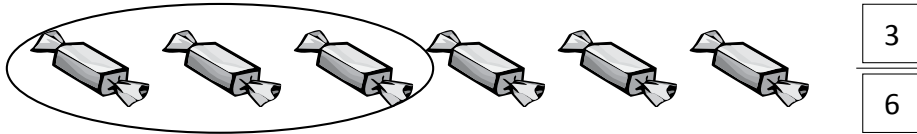
Math Review Task

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Chance and Data:

Introducing fractions – fractions of a collection

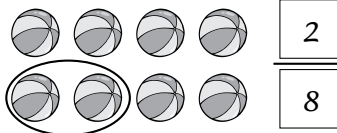
Fractions can show part of a collection. 3 out of 6 candies are circled.



1 What fraction of each group is circled?

a

2	out of	8
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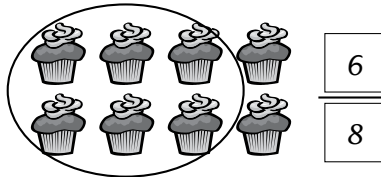
b

3	out of	4
---	--------	---



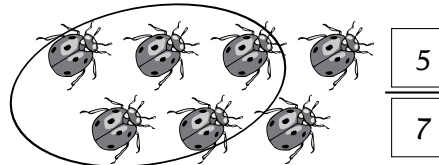
c

6	out of	8
---	--------	---



d

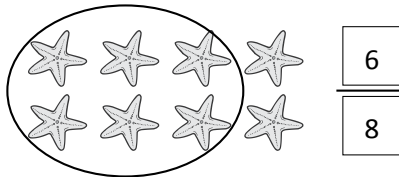
5	out of	7
---	--------	---



2 Circle the fraction shown:

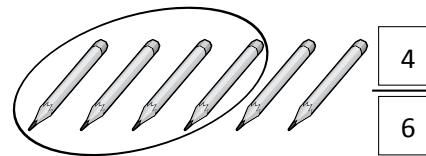
a

6	out of	8
---	--------	---



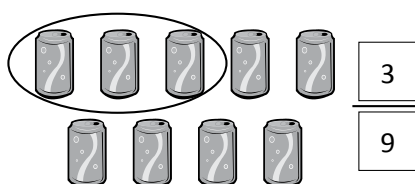
b

4	out of	6
---	--------	---



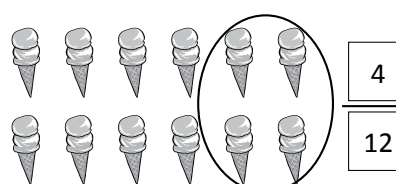
c

3	out of	9
---	--------	---



d

4	out of	12
---	--------	----



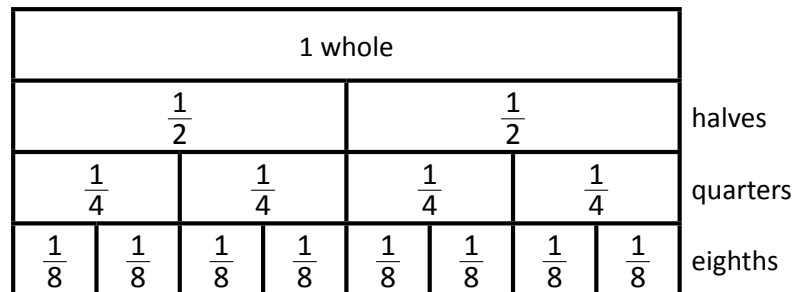
Math Review Task

Grade 3

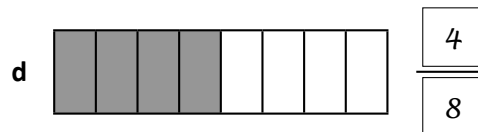
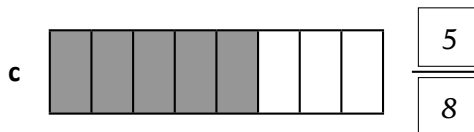
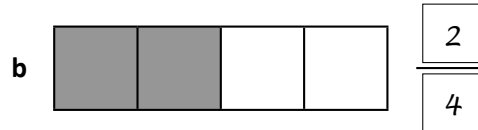
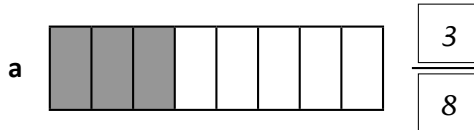
Chance and Data:

Introducing fractions – comparing and ordering fractions

This fraction wall is just like your fraction strips laid out side by side.



1 Label the following fractions:



e What do you notice with the fractions shown in b and d?

They are both the same as $\frac{1}{2}$.

2 Use the fraction wall at the top of this page to decide which fraction is larger and circle it:

a $\frac{1}{4}$ or $\frac{3}{8}$

b $\frac{2}{8}$ or $\frac{1}{2}$

c $\frac{3}{4}$ or $\frac{4}{8}$

d $\frac{1}{2}$ or $\frac{5}{8}$

e $\frac{5}{8}$ or $\frac{3}{4}$

f $\frac{2}{4}$ or $\frac{3}{8}$

3 Put these fractions in order from smallest to largest:

a $\frac{4}{8}, \frac{1}{8}, \frac{3}{4}, \frac{7}{8}$ $\frac{1}{8}, \frac{4}{8}, \frac{3}{4}, \frac{7}{8}$

b $\frac{7}{8}, \frac{1}{2}, \frac{1}{4}, \frac{5}{8}$ $\frac{1}{4}, \frac{1}{2}, \frac{5}{8}, \frac{7}{8}$

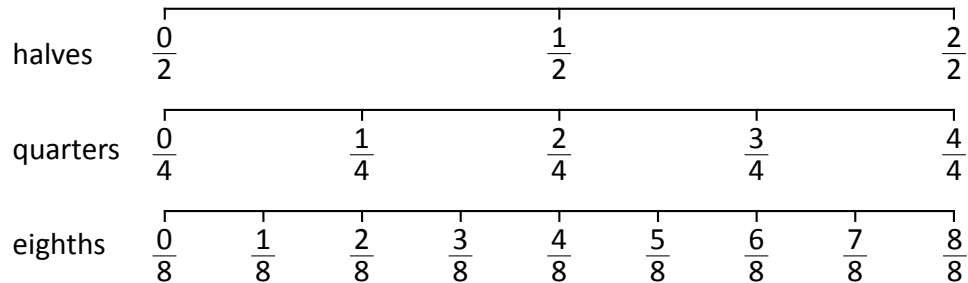
Math Review Task

Grade 3

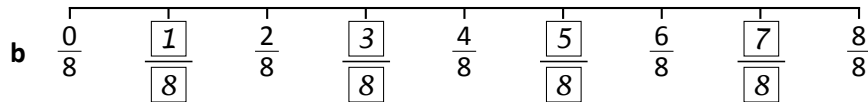
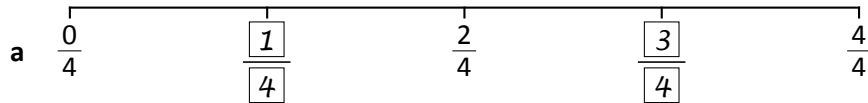
Chance and Data:

Introducing fractions – comparing and ordering fractions

Let us now look at placing fractions on number lines.



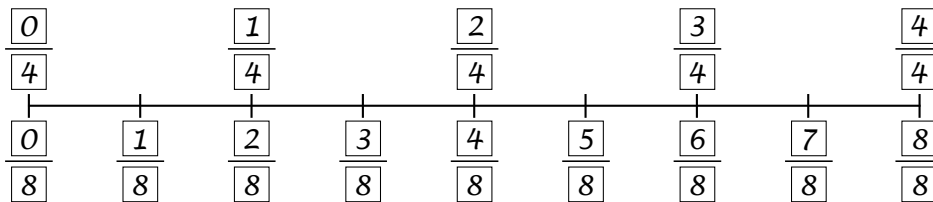
4 Label the missing fractions on these number lines:



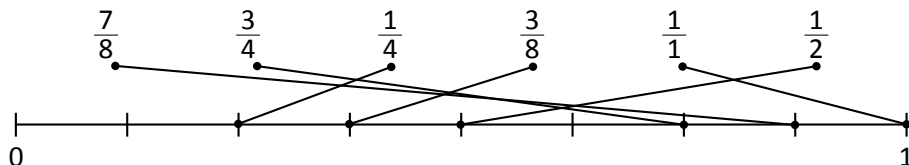
c What do you notice about $\frac{2}{4}$ and $\frac{4}{8}$?

They are the same.

5 Label this number line with quarters above the line and eighths below the line:



6 Draw a line to match each of these fractions to the correct positions on the number line. Use the number lines at the top of the page to help you.



Math Review Task

Grade 3

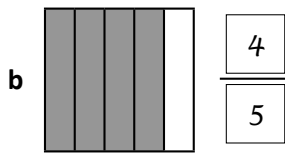
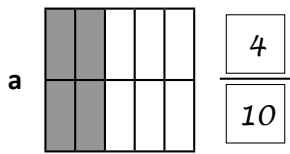
Chance and Data:

Types of fractions – fifths and tenths

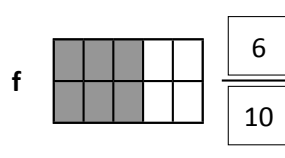
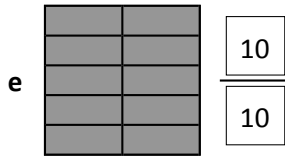
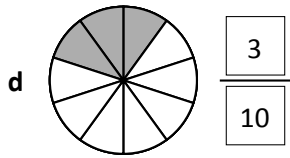
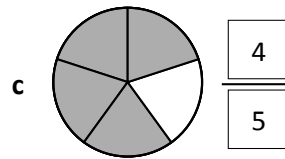
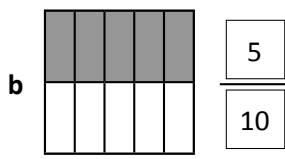
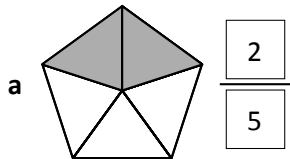
These fraction strips show fifths and tenths.

$\frac{1}{5}$	$\frac{1}{5}$	$\frac{1}{5}$	$\frac{1}{5}$	$\frac{1}{5}$					
$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$

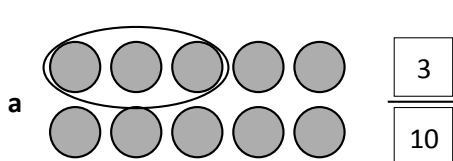
1 Label these fractions:



2 Show fifths and tenths on these shapes:



3 Circle the correct amounts shown in these fractions:



Math Review Task

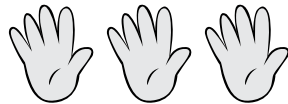
Grade 3

Mathletics

Chance and Data:

Introducing multiplication – groups of 5

Use repeated addition to find the total number of fingers.

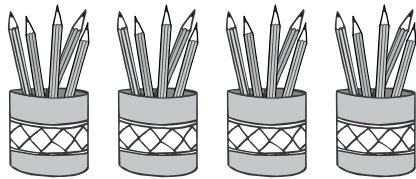


$$5 + 5 + 5 = 15$$

3 groups of 5 is equal to 15.

1 Find the total of each group by using repeated addition.

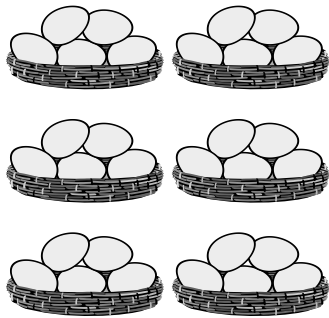
a How many pencils?



$$5 + 5 + 5 + 5 = 20$$

4 groups of 5 is equal to 20

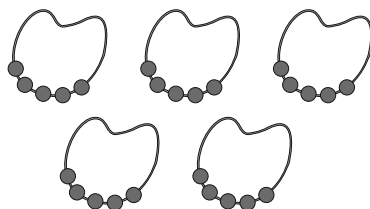
b How many eggs?



$$5 + 5 + 5 + 5 + 5 + 5 = 30$$

6 groups of 5 is equal to 30

c How many beads?



$$5 + 5 + 5 + 5 + 5 = 25$$

5 groups of 5 is equal to 25

Math Review Task

Grade 3

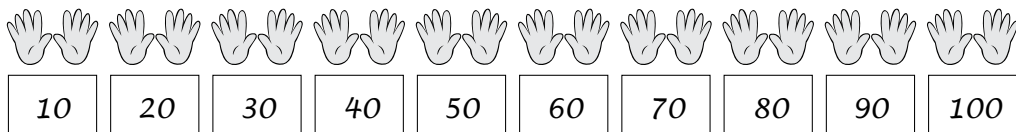
Mathletics

Chance and Data:

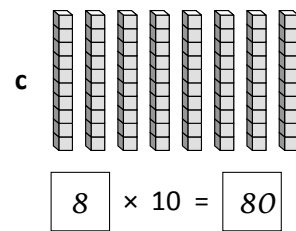
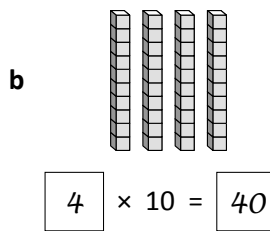
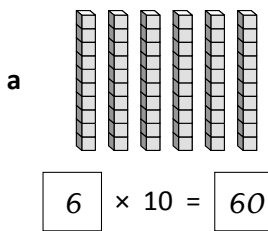
Introducing multiplication – 10 times table

If you can skip count in 10s, you know your 10 times table.

1 Complete this sequence by counting in 10s:



2 Count the longs and then complete the multiplication fact:



3 Complete the 10 times table:

$$\begin{aligned} 1 \times 10 &= 10 \\ 2 \times 10 &= 20 \\ 3 \times 10 &= 30 \\ 4 \times 10 &= 40 \\ 5 \times 10 &= 50 \\ 6 \times 10 &= 60 \\ 7 \times 10 &= 70 \\ 8 \times 10 &= 80 \\ 9 \times 10 &= 90 \\ 10 \times 10 &= 100 \end{aligned}$$

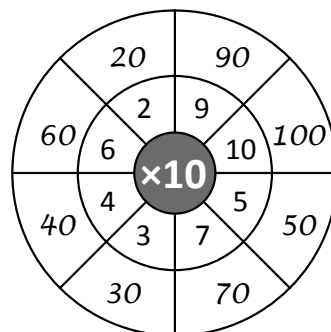
4 Write the missing number in each 10 times table fact:

a $5 \times 10 = 50$

b $8 \times 10 = 80$

c $7 \times 10 = 70$

5 Complete this $\times 10$ wheel:



Math Review Task

Grade 3

Chance and Data:

Multiplication facts – 2 times table

3 How many straws are in:

a 3 drinks?

$$\boxed{3} \times 2 = \boxed{6}$$

b 10 drinks?

$$\boxed{10} \times 2 = \boxed{20}$$

c 5 drinks?

$$\boxed{5} \times 2 = \boxed{10}$$

d 2 drinks?

$$\boxed{2} \times 2 = \boxed{4}$$



4 How many wheels are on:

a 4 bikes?

$$\boxed{4} \times 2 = \boxed{8}$$

b 9 bikes?

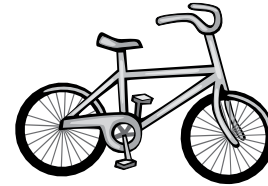
$$\boxed{9} \times 2 = \boxed{18}$$

c 7 bikes?

$$\boxed{7} \times 2 = \boxed{14}$$

d 3 bikes?

$$\boxed{3} \times 2 = \boxed{6}$$



5 Double each number:

$$\text{a } 6 \times 2 = \boxed{12}$$

$$\text{b } 9 \times 2 = \boxed{18}$$

$$\text{c } 8 \times 2 = \boxed{16}$$

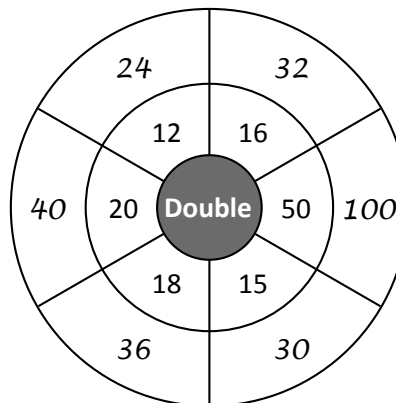
$$\text{d } 7 \times 2 = \boxed{14}$$

Multiplying by 2 is the same as doubling.



REMEMBER

6 Complete this doubling wheel. These facts are not in the 2 times table, but they are facts that are useful to know.



Math Review Task

Grade 3

Chance and Data:

Mental multiplication strategies – split strategy

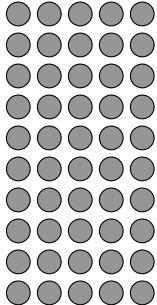
The split strategy is when we multiply numbers in 2 parts.

Let's use the split strategy for 12×5 .

Split 12 into 10 and 2. Next multiply each part by 5, then add:

What is 12×5 ?

$10 \times 5 = 50$ $2 \times 5 = 10$



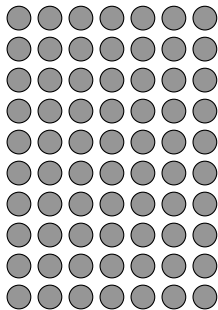
$50 + 10 = 60$

So, $12 \times 5 = 60$

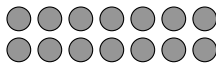
1 Try the split strategy with these. Use the arrays if you get stuck.

a What is 12×7 ?

$$10 \times \boxed{7} = \boxed{70}$$



$$2 \times \boxed{7} = \boxed{14}$$

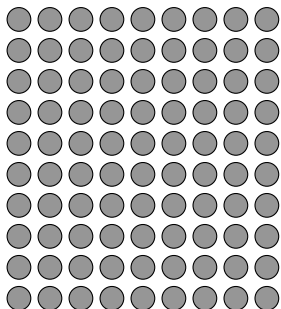


$$\boxed{70} + \boxed{14} = \boxed{84}$$

$$\text{So, } 12 \times 7 = \boxed{84}$$

b What is 12×9 ?

$$10 \times \boxed{9} = \boxed{90}$$



$$2 \times \boxed{9} = \boxed{18}$$



$$\boxed{90} + \boxed{18} = \boxed{108}$$

$$\text{So, } 12 \times 9 = \boxed{108}$$

Math Review Task

Grade 3

Chance and Data:

Mental multiplication strategies – compensation strategy

Remember how we learned the $\times 9$ by building down from the $\times 10$?

$$3 \times 10 = 30 - 3 \longrightarrow 3 \times 9 = 27$$

This is the compensation strategy.

Look at 3×19 . 19 is close to 20, so we can multiply by the next multiple of ten, which is 20. Then we build down because we have an extra group of 3.

$$3 \times 19 \longrightarrow 3 \times 20 = 60 - 3$$

So, $3 \times 19 = 57$

- 1** When you are multiplying by a multiple of ten, look for a fact you know, then put a zero on the end. These patterns show you how to do this:

a $3 \times 2 = \boxed{6}$

$3 \times 20 = \boxed{60}$

b $5 \times 3 = \boxed{15}$

$5 \times 30 = \boxed{150}$

c $7 \times 2 = \boxed{14}$

$7 \times 20 = \boxed{140}$

d $4 \times 4 = \boxed{16}$

$4 \times 40 = \boxed{160}$

- 2** The steps for the compensation strategy are set out for you here. Practice multiplying by the next multiple of ten and then build down.

a $5 \times 29 \longrightarrow 5 \times 30 = \boxed{150} - 5$

So, $5 \times 29 = \boxed{145}$

b $3 \times 19 \longrightarrow 3 \times 20 = \boxed{60} - 3$

So, $3 \times 19 = \boxed{57}$

c $2 \times 39 \longrightarrow 2 \times 40 = \boxed{80} - 2$

So, $2 \times 39 = \boxed{78}$

Math Review Task

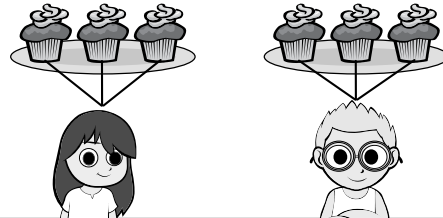
Grade 3

Chance and Data:

Division – sharing and grouping

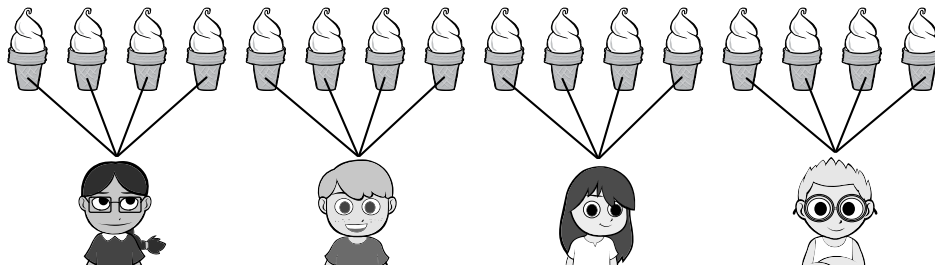
Division is when we make equal shares.

If we share these 6 cakes equally between 2 kids, they each get 3 cakes.

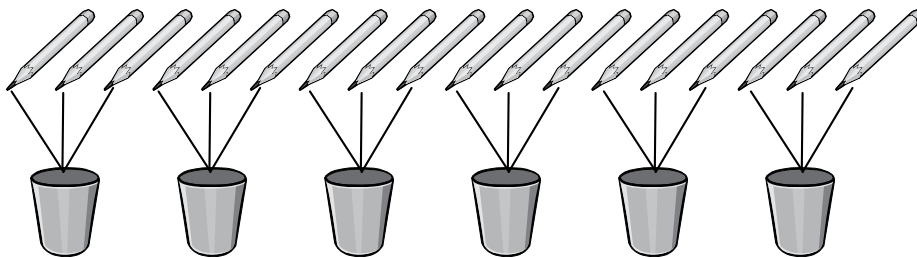


- 1 Share the items equally in each picture by drawing lines to connect them. Write how many are in each share.

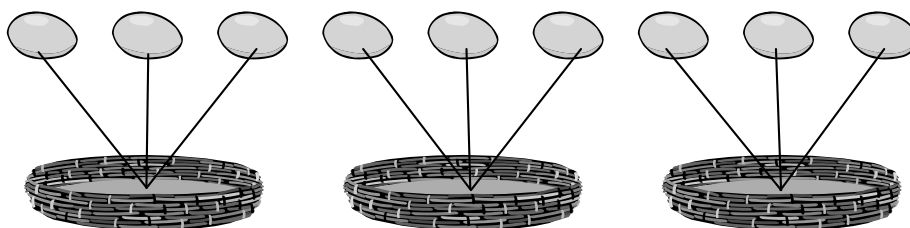
- a Share these 16 ice creams among 4 kids. 4 equal shares = 4 each



- b Share these 18 pencils between 6 cups. 6 equal shares = 3 each



- c Share these 9 eggs between 3 baskets. 3 equal shares = 3 each



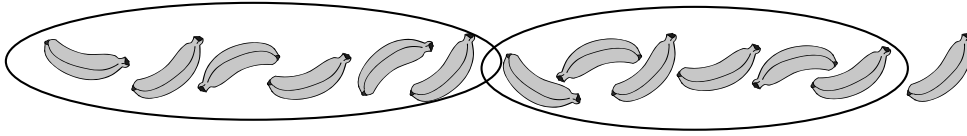
Math Review Task

Grade 3

Chance and Data:

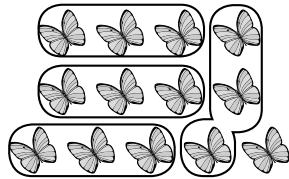
Division – left overs

Sometimes when we make equal groups there are some left over.
Here are 13 bananas. If we make 2 equal groups of 6, there is 1 banana left over.



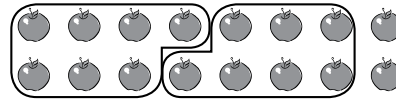
1 Make groups of each of the following items and show the left overs:

a Here are 13 butterflies:



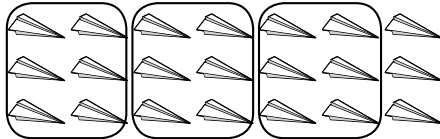
If we make 4 equal groups
of 3 there is 1 left over.

b Here are 16 apples:



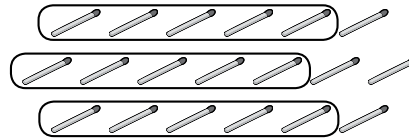
If we make 2 equal groups
of 7 there are 2 left over.

c Here are 21 paper planes:



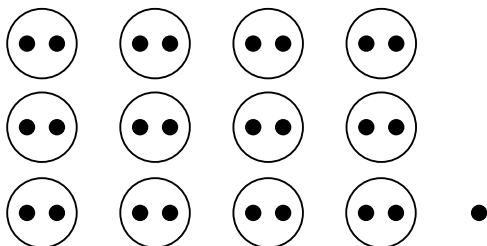
If we make 3 equal groups
of 6 there are 3 left over.

d Here are 19 match sticks:



If we make 3 equal groups
of 5 there are 4 left over.

2 Draw a picture to show 12 groups of 2 with 1 left over.



How many are there in total? 25

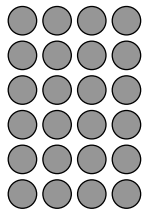
Math Review Task

Grade 3

Chance and Data:

Division – linking multiplication and division facts

Knowing multiplication facts will help with division facts.



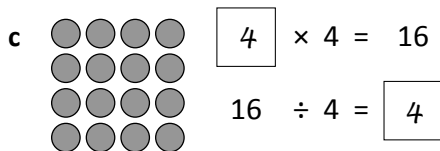
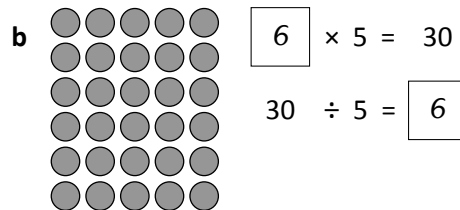
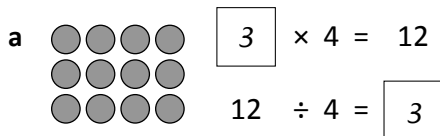
$$6 \times 4 = 24$$

6 rows of 4 is 24.

$$24 \div 4 = 6$$

24 divided into 4 shares is 6.

1 Describe each of these arrays using one multiplication and one division fact:



2 This time, you are given part of the array. Complete the array and then write one multiplication and one division fact that matches:

