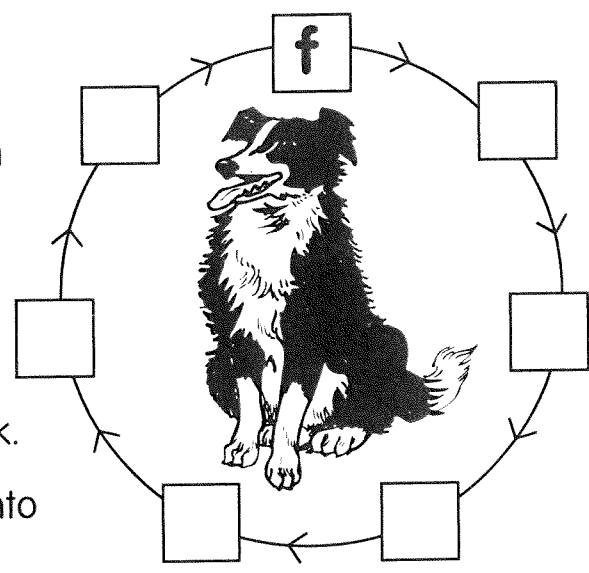




Name: _____

The life cycle of a border collie

Border collies are a breed of dogs that have been specially bred to help farmers. They are hard-working animals that seem to enjoy rounding up sheep. They often work in harsh environments.



- Here are the seven stages in the life cycle of a border collie.
- a The puppies feed on their mother's milk.
- b Over 63 days each embryo develops into a puppy.
- c The puppies are weaned and begin to feed independently.
- d Inside the female, eggs are fertilised and become embryos.
- e A litter of as many as seven puppies is born.
- f Adult male and female border collies mate.
- g It takes a year for a puppy to mature into an adult dog.

1. Complete the life cycle diagram for a border collie. Put the letter showing each stage in the correct box.
2. Look again at the sentences that describe the life cycle of a border collie. Find these words and underline them in the sentence, then write what you think it means in the space below:

weaned _____

embryo _____

mature _____

3. Why do you think border collies, and other dogs, produce so many puppies?

Dear Helper,

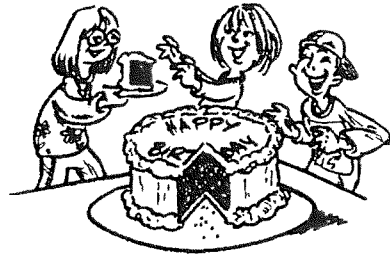
This activity aims to improve your child's understanding of the life cycle of mammals. Help your child use a dictionary to find the meanings of the words in question 2 if they get stuck. To help your child think about question 3, ask them what difficulties young animals might have in surviving, especially if they weren't looked after by humans.

Name _____

N33

N34

Making division easier



Some divisions can be made easier by first dividing both numbers by 10 or 100.

$$40 \div 30 = 4 \div 3 \text{ (dividing both by 10)}$$

or

$$840 \div 700 = 8.4 \div 7 \text{ (dividing both by 100)}$$



Try these:

1 $74 \div 20$

2 $315 \div 50$

3 $91 \div 70$

4 $720 \div 300$

5 $126 \div 60$

6 $760 \div 200$

7 $240 \div 400$

8 $640 \div 40$

9 $8500 \div 500$

Some divisions can be made easier by first multiplying both numbers by 10 or 100.

$$0.45 \div 0.9 = 4.5 \div 9 \text{ (multiplying both by 10)}$$

or

$$1.28 \div 0.08 = 128 \div 8 \text{ (multiplying both by 100)}$$



Try these:



10 $1.2 \div 0.3$

11 $11.5 \div 0.5$

12 $23.4 \div 0.9$

13 $1.32 \div 0.02$

14 $0.84 \div 0.7$

15 $2.16 \div 0.06$

16 $0.81 \div 0.09$

17 $0.96 \div 0.4$

18 $0.96 \div 0.08$

Verbs with verve

• Re-write these lines from poems. Replace the words in bold type with a verb from the notepad.

1. And frost was **shining** on the ground,

2. And **going** along like troops in a battle,

3. All that's beautiful **goes slowly** away

4. As if through a dungeon-grate he **looked**

5. But soon there **blew** a wind on me

6. What loud uproar **comes** from that door!

7. The wind one morning **got** up from sleep

8. You should not **stay** longer at this brook

9. The feathers go **moving**, around and around,

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

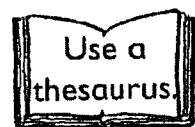
Notepad

breathe
burst
charge
drift
glitter
loiter
peer
spring
swirl

Use the correct tense and person for each verb.



• List ten different words for 'laugh'. Describe the type of laugh which each word suggests.



Teachers' note Introduce the activity by reading a poem containing verbs which create a vivid impression of the actions portrayed: for example, *From a Railway Carriage* by Robert Louis Stevenson, *Goblin Market* by Christina Rossetti or *The Cataract of Lodore* by Robert Southey.

Developing Literacy
Poetry Year 6
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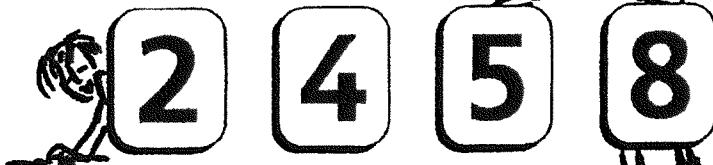
N27

N28

Factor sentences



Use these four number cards:



Each digit can be used up to four times.
How many correct sentences can you complete?

2 is a factor of

--	--

3 is a factor of

--	--

4 is a factor of

--	--

5 is a factor of

--	--

6 is a factor of

--	--

7 is a factor of

--	--

8 is a factor of

--	--

9 is a factor of

--	--



Try with these number cards:



Try with your own set of digits.

Fractions of an amount – finding fractions

What process do we use to find fractions of amounts?

When we find $\frac{1}{4}$ of 20, we are sharing 20 into 4 groups. We use **division** to find fractions.

- 1 Warm up with this puzzle. Use division to find the answer to each clue. The solved puzzle will tell you the name of a very important day of the year.

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
2	11	25	4	9	3	8	5	75	10	9	8	50

L = $\frac{1}{4}$ of 16

Y = $\frac{1}{2}$ of 100

A = $\frac{1}{12}$ of 96

D = $\frac{1}{7}$ of 63

O = $\frac{1}{2}$ of 22

S = $\frac{1}{100}$ of 1000

H = $\frac{1}{4}$ of 300

T = $\frac{1}{11}$ of 55

M = $\frac{1}{3}$ of 9

W = $\frac{1}{2}$ of 4

R = $\frac{1}{4}$ of 100

Put this date in your diary! Tell your friends!



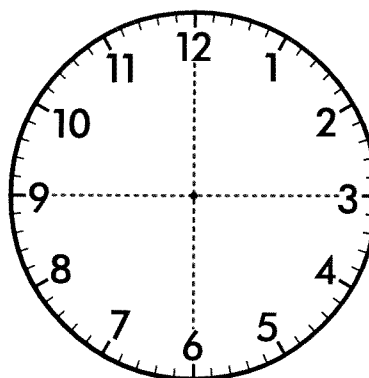
- 2 We use fractions of time regularly in our lives. Use the clock to work out:

a What fraction of an hour is 15 minutes?

b What fraction of an hour is 30 minutes?

c What fraction of an hour is 45 minutes?

d What fraction of an hour is 20 minutes?



e If Lucas practises guitar from 4:20 to 4:35 each day, what fraction of an hour does this represent?

f Patrick practises soccer for 1 hr 15 min. How would you express that as an improper fraction?

g Find 3 time spans that represent $\frac{1}{3}$ of an hour.

_____ to _____ to _____ to _____



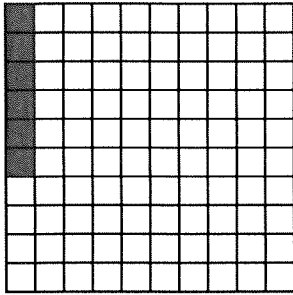
Getting ready

We have been using 100 grids to represent percentage, with each square representing 1%.



What to do

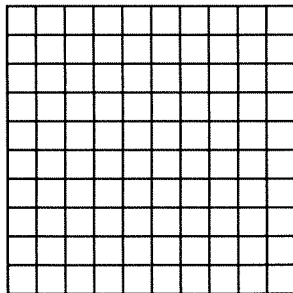
These grids are set up a little differently. Work with a partner to figure out what each square represents and then answer the questions.



Problem 1

These 6 squares have a value of 36.

- a What is the value of 1 square? _____
- b What is the value of the entire grid? _____
- c If 50% of the grid is shaded, what value is shaded? _____

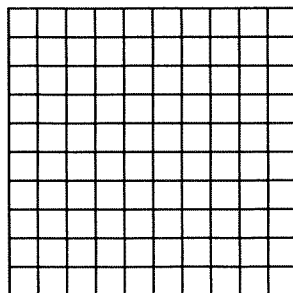


Problem 2

There are 140 convenience stores in Smallville.

- a 40% of these stock your favourite Slurpee flavour. Use the grid to represent this information.
- b How many stores sell your favourite flavour? _____

300 people



Problem 3

- a If this grid represents 300 people, what does each square represent? _____
- b How many people are represented by ten squares? _____
- c 60 of the 300 people like watching sports. Represent this on the grid in red.
- d 225 people prefer playing sport to watching it. Represent this in green.