

St Denys Primary School



Year 3 and Year 4

Home Learning

**Week beginning:
15th June 2020**

**Creativity, Choice, Challenge
Achievement for All**

Year 3 and Year 4 - Home Learning

Whilst we are not expecting you to replicate school at home, it will be important that you all try to do some work each school day to keep your skills up.

And don't forget to stay active!



As you will already know, schools are not yet open for all children.


In this booklet you will find a range of different activities and tasks that you can choose to complete during the week.

There is also a separate booklet for each class that will contain your new spelling words and your daily Times Table Rockstar challenge. These can be collected from the school office or downloaded online.

Each morning your teacher will still be saying 'Hello' on Class Dojo. You'll also be able to ask any questions or just them about what you have been up to! As your teachers will be in school, remember they might not be able to respond straight away. You will still be able to post things to your Class Dojo portfolio but it might not always be your teacher who approves and leaves comments for you.




Class 3, if you want to try some online lessons, check out BBC Bitesize.

Year 3/ P4 online lessons					Bitesize				
Monday 15 June - Friday 19 June					Daily Lessons				
Monday		Tuesday		Wednesday		Thursday		Friday	
English Exploring poetry		English Sound words		English Nonsense poetry		English Alliteration		English Reading lesson: Slime by David Walliams	
Maths Ordering fractions		Maths Adding fractions with the same denominator		Maths Subtracting fractions with the same denominator		Maths Problem-solving with addition and subtraction of fractions		Maths Challenge of the week	
History What was it like to live in Roman Britain?		Geography Volcanoes		Science Teeth and the digestive system		Design and Technology Design skills		Computing What are viruses?	
Find all this content and more at: bbc.co.uk/bitesize/dailylessons									

Lessons are available daily. Here is the schedule for this week.

Class 4, if you want to try some online lessons, check out BBC Bitesize.

Year 4/ P5 online lessons					Bitesize				
Monday 15 June- Friday 19 June					Daily Lessons				
Monday		Tuesday		Wednesday		Thursday		Friday	
English Exploring poetry		English Sound words		English Learning a poem off by heart		English Rhyming in poetry		English Reading lesson: Slime by David Walliams	
Maths Writing decimals		Maths Compare two decimals		Maths Order decimals		Maths Rounding decimals to nearest whole number		Maths Challenge of the week	
History What was it like to live in Roman Britain?		Geography Volcanoes		Science Teeth and the digestive system		Design and Technology Structures		Computing What are viruses?	
Find all this content and more at: bbc.co.uk/bitesize/dailylessons									

Lessons are available daily. Here is the schedule for this week.

Year 3 and Year 4 Spelling Words

accident(ally)
actual(ly)
address
answer
appear
arrive
believe
bicycle
breath
breathe
build
busy/business
calendar
caught
centre
century
certain
circle
complete
consider

continue
decide
describe
different
difficult
disappear
early
earth
eight/eighth
enough
exercise
experience
experiment
extreme
famous
favourite
February
forward(s)
fruit
grammar

group
guard
guide
heard
heart
height
history
imagine
increase
important
interest
island
knowledge
learn
length
library
material
medicine
mention
minute

natural
naughty
notice
occasion(ally)
often
opposite
ordinary
particular
peculiar
perhaps
popular
position
possess(ion)
possible
potatoes
pressure
probably
promise
purpose
quarter

question
recent
regular
reign
remember
sentence
separate
special
straight
strange
strength
suppose
surprise
therefore
though/although
thought
through
various
weight
woman/women

How many of these spelling words can you read and write?

Can you use any of these words in your own sentences?

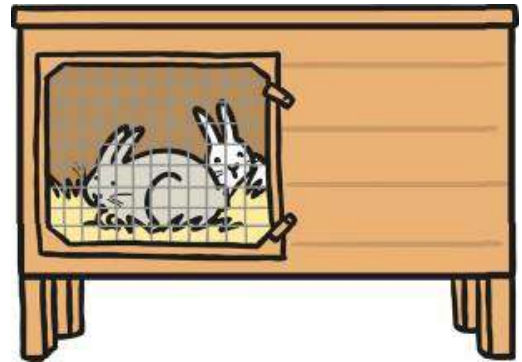
Weekly Writing Challenge

This week, you are going to plan and write a short story. The idea for your story is '**A Day in the Life of a Pet**'.

Imagine you are someone's pet. You can be anywhere and belong to anyone.

Here are some examples:

- A snake who feels he is misunderstood and just wants to be cuddled.
- A hamster who thinks he is a superhero and must rescue the cat from the dog.
- A bird who is afraid of flying.
- A tarantula who is madly in love with his owner.
- A stick insect who thinks she is a supermodel.
- A rabbit who hates having big ears.



Remember to:

- Plan your story with a beginning, middle and end. How are you going to hook the reader at the start? Create a storyboard to tell your story.
- Organise your ideas into paragraphs.
- Choose your words carefully to entertain the reader.
- Write in sentences. Try to think of really good descriptive words to use.
- Pay attention to your spelling and punctuation.
- Read, check and edit your work carefully.
- Decide how you are going to publish your story: writing it out, typing it, making a book?

A Day in the Life of a Pet

1.

2.

3.

4.

5.

6.

7.

8.























DESCRIPTION USING THE SENSES



How many different words can you think of to use instead of the word scary?

You are having a day out at a well-known theme park.
Write 2 or 3 sentences for every task.

Task 1:

Describe getting on the rollercoaster and travelling slowly up to the top.

- How is your stomach doing?
- What have you heard about this ride?
- Why is your friend putting his hands in the air ready for the fall?

Task 2:

Describe looking down from the top of the rollercoaster.

Are you ready for the drop?

Task 3:

How does it feel as you whiz through the air?

Will you get on the rollercoaster again?



CHARACTER ARGUMENT WRITING

Elena is an acrobat in the circus. She is an award winning performer but is getting tired of travelling and rehearsing so much. She is thinking about giving it all up and becoming a police officer.

Explain to Elena the reasons why she should continue to be an acrobat.

Then explain the reasons why she should join the Police force.

This will help her think through her big decision.

Describe what is happening in the photograph.

DESCRIPTION



Make a list of all of the things that show this car is different to your family car. E.g. golden hubcaps

You work in a car showroom where this car is on display.

Task - Choose either:

A

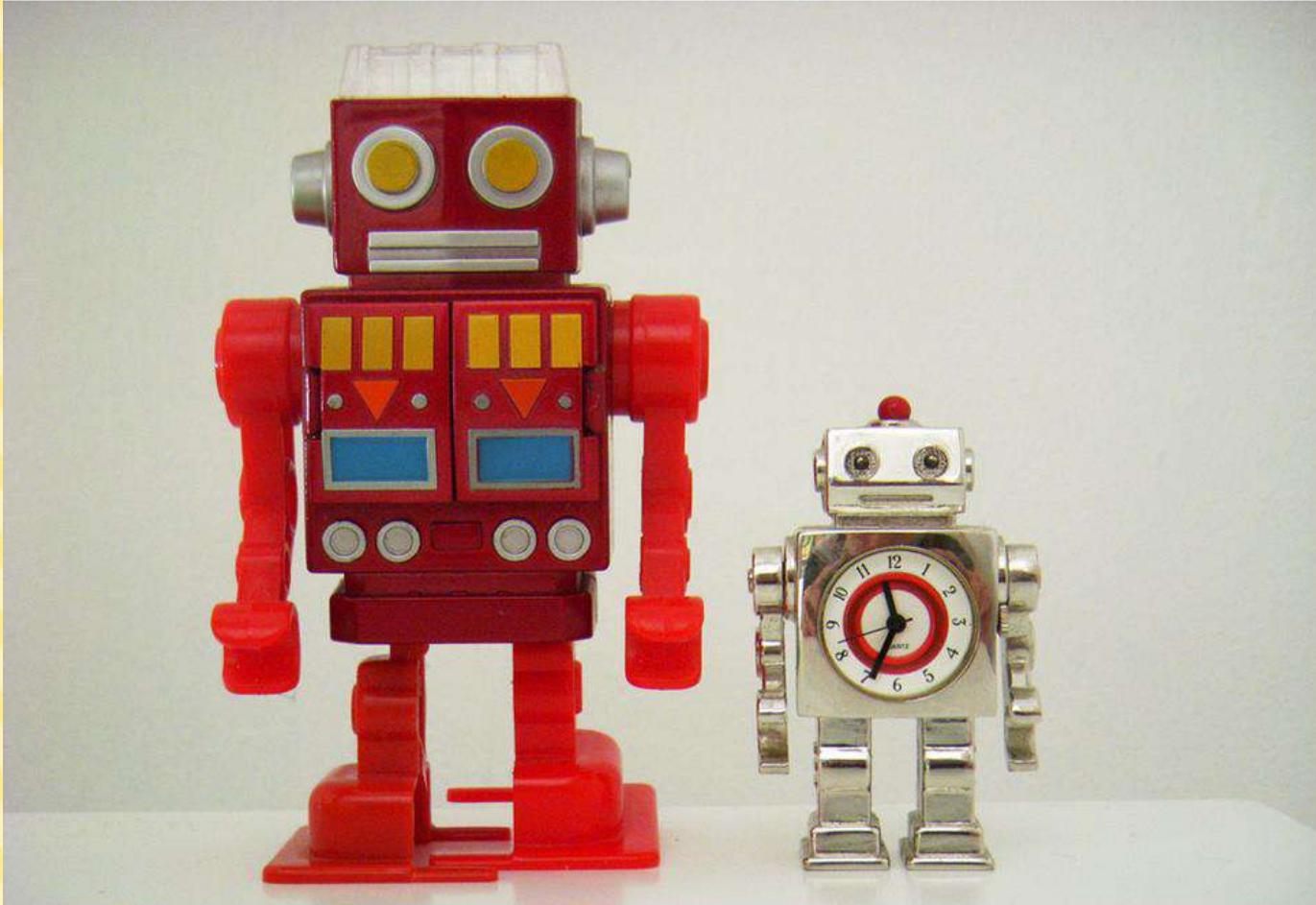
Describe all of the features of the car so that someone will buy it.

OR

B

Try and decide between this car and another more sensible, more affordable car for your family. Explain which car you have chosen and why.

INFERENCE / IMAGINING PLOTS



If this picture was on the front cover of a book, what would the book be called?

How many can you think of?

Using one of the titles you thought of, describe the plot (story) to the book.

ASKING QUESTIONS



What kind of questions can we ask about this photograph?

Garden Birds

Whether you live in a village, town or city, you will have seen British garden birds in your garden, school grounds or local park. The UK is lucky enough to have many **native** garden birds. Let's find out about some of them...



Robin

With their bright red breast and face, robins are easy to spot, despite being only around 13cm long. You will often hear them singing into the evening with their high 'tic tic tic' song.

Robins can be seen in gardens throughout cities, towns and villages. They will nest almost anywhere, including inside old watering cans or sheds. They will make a cup-shaped nest mainly from moss in which they will lay 4-6 eggs (white with sandy or red freckles) between May and July.

Their usual diet includes:

- insects and their larvae;
- spiders;
- worms;
- weeds;
- fruit;
- berries;
- seeds;
- nuts.

To encourage robins into your garden, you could provide them with **mealworms** on a bird table. Robins can become very tame and might even eat out of your hand!



Blackbird

Male blackbirds are usually jet-black with an orange beak, whereas females are dark brown with a brown beak. They are larger than robins, at around 25cm long. They can also be heard singing in the evening with their tuneful song.

Blackbirds are found in a wide variety of habitats, including:

- woodland;
- towns;
- fields;
- gardens;
- cities;
- countryside.

Originally, blackbirds were woodland birds; they usually nest in bushes or trees, using grass, horsehair and mud to make their nests. Although they mostly eat insects, they can have a very varied diet and this is one of the reasons they manage to survive. Blackbirds are also able to catch worms if the grass is soft enough for them to dig with their beaks.



Wren

Size: 9-10cm long

Weight: 8-13g (the same as a £1 coin!)

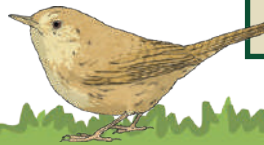
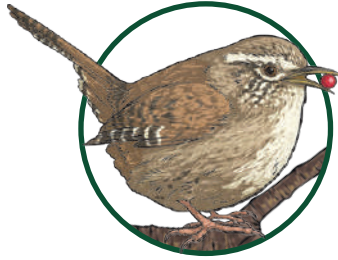
Eggs: 5-8 eggs (white with red freckles)

Diet: Insects and spiders

Nests: Made from grass, moss and leaves and lined in feathers

Song: A loud “teck teck teck” call ending in a **trill**

Despite being so small, wrens are the loudest and most common of Britain’s native birds. They have brown **plumage** and a short tail, which constantly flicks. Young wrens are almost identical to their parents except that they don’t have pale eyebrows.



Threats to Garden Birds and How You Can Help

There are things that we use in our gardens which could harm garden birds, such as:

Netting – People use nets in their gardens to stop birds getting to their vegetables, but birds can become tangled in them. If nets are needed, it is best to use fine mesh nets made of natural material.

Outside lights – Outside lights can confuse birds causing them to collide with windows as they use the light to **navigate**. If you have outside lights, put them on a timer so they do not stay on at night.

Artificial Grass – **Artificial** turf destroys habitats for birds and the insects they eat so it is best to use natural grass wherever possible.

Did You Know...?

Many people think that the wren is Britain’s smallest native bird. However, the goldcrest is smaller at just 9cm long and 6g in weight!



Did You Know...?

Although they are not always **resident** in the UK, nightingales are special summer visitors to parts of southern England. They are very secretive and hard to spot but their melodic song can be heard through the day and night. They are some of the loudest, fastest singers of the bird world!



Questions

1. How many eggs will robins lay? Tick one.

- ☐ 4-6
☐ 5-8
☐ 9-10
☐ 13

2. Draw three lines to match each bird to their size.

robin

wren

blackbird

13cm long

25cm long

9-10cm long

3. What is the smallest native bird in the UK?

4. Fill in the missing words:

Nightingales are not always _____ in the UK but are special _____ visitors to parts of _____ England.

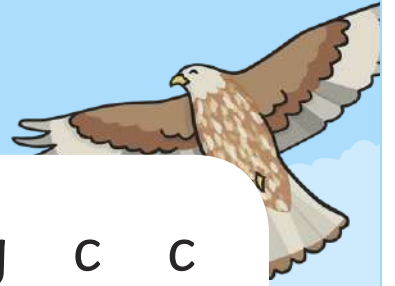
5. Find and copy a word from the **Threats to Garden Birds and How You Can Help** section which means the same as **crash into**.

6. Who do you think that the author has written the text for?

7. Explain how you could help British garden birds.

8. Which of the birds mentioned would you most like to see? Give at least **two** reasons.

British Birds



u n s w i f t j v g c c
t a z m k q c f p p i h
w x j a c k d a w i w a
o i w v s p a r r o w f
o w w n o b s c g e o f
d x b l a c k b i r d i
p g o l d f i n c h m n
i g c y u c v t w t a c
g u r a x t p n q r g h
e r o b i n w u k j p u
o z w t f b l u e t i t
n b s t a r l i n g e u

jackdaw

robin

magpie

starling

swift

sparrow

wood pigeon

goldfinch

blue tit

blackbird

crow

chaffinch



Year 3 Maths (part 1):

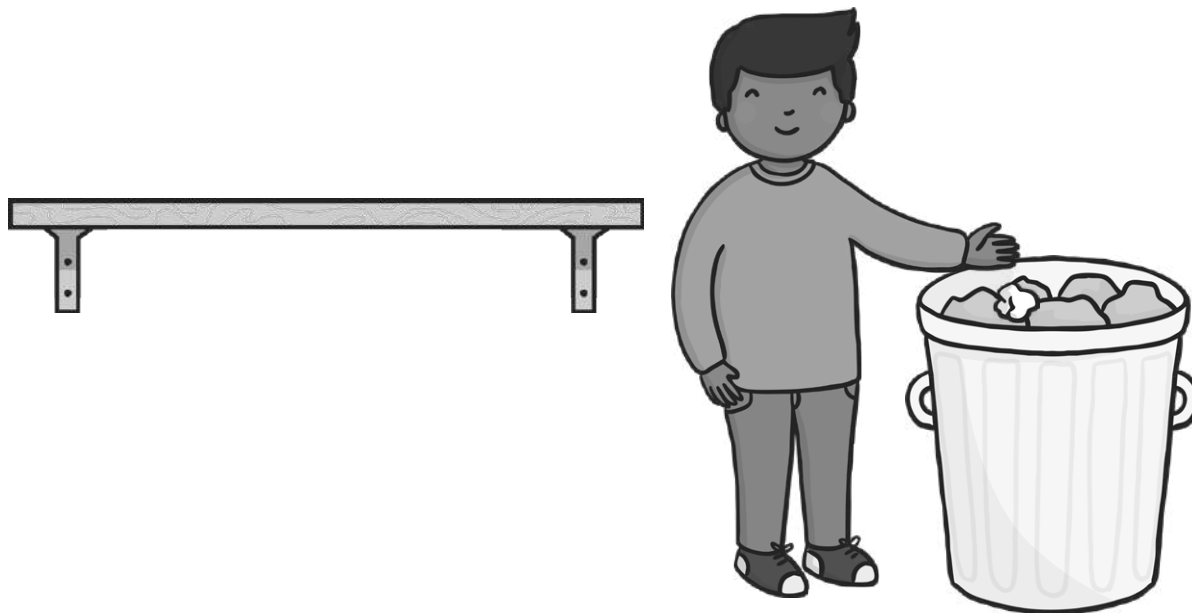
Have a go at these multiplication and division questions. To calculate the answers you will need to use the skills you have already been using in the classroom.

1. Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers.

a) Oliver Odd collects odd numbers for his shelf and puts even numbers in the bin.

Can you help him sort these numbers?

8 5 14 17 29 36



b) Answer the following questions.

$5 \times 10 = \boxed{}$

$7 \times 5 = \boxed{}$

$40 \div 5 = \boxed{}$

$\text{half of } 24 = \boxed{}$

$\text{double } 8 = \boxed{}$

$\boxed{} \div 10 = 10$

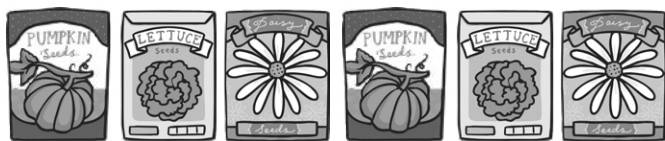
$12 \times 5 = \boxed{}$

$9 \times 2 = \boxed{}$

$\boxed{} \div 2 = 7$

2. Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (\times), division (\div) and equals ($=$) signs.

Write a multiplication or a division sentence around the following pictures.



Each packet contains 10 seeds. How many seeds are there altogether?



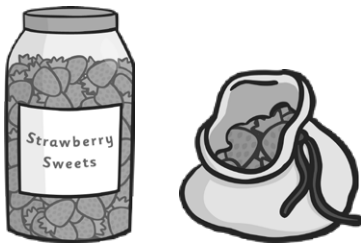
2 marks



9 marks



1 mark

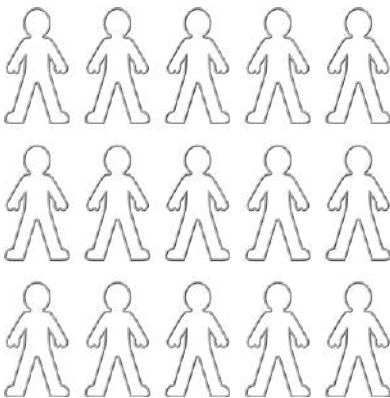


There are 60 sweets. If I put 5 in each bag, how many bags will I need?

1 mark

3. Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot.

Write 2 multiplication sentences and 2 division sentences for the following array.



<input type="text"/>	x	<input type="text"/>	=	<input type="text"/>
<input type="text"/>	x	<input type="text"/>	=	<input type="text"/>
<input type="text"/>	÷	<input type="text"/>	=	<input type="text"/>
<input type="text"/>	÷	<input type="text"/>	=	<input type="text"/>

4 marks

4. Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.

There are 12 children in the group. If I want to give 5 sweets to each of the children, how many sweets do I need to buy?



I buy 120 treats for my dog. If I give him 10 a day, how many days will they last?



24 children go on a school trip on two buses. If there are the same number of children on each bus, how many children will there be on each bus?



3 marks

Year 3 Maths (part 2):

Here are some more questions for you to have a go at that will practice your multiplication and division skills.

1. Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.

Fill in the missing numbers:

$\times 4 = 16$

$24 \div$

$= 4$

$\div 3 = 7$

$\times 3 = 24$

$8 \times$

$= 48$

$8 \times$

$= 32$

6 marks

2. Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods.

a) Complete these calculations, using the top calculation to help solve the calculation below

$4 \times 3 =$	$4 \times 5 =$
$40 \times 3 =$	$4 \times 5 \times 10 =$



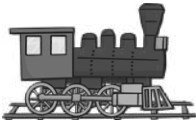



4 marks

b) Use written methods to complete these calculations

$14 \times 4 =$	$26 \times 3 =$
$69 \div 3 =$	$72 \div 4 =$

4 marks

3. Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects.

<p>a) Tim's sunflower grew to 50cm. Alina's was three times as high. How tall was Alina's sunflower?</p>  <input type="text"/>	<p>b) Stefan had a bag of sweets for his birthday and shared them equally with his three friends. He had 24 sweets in the bag, how many sweets did each of the four children get?</p>  <input type="text"/>
<p>c) Safiya made a train track that went all around the room. It was 22 metres long. Simon went outside to make a train track and his was four times as long. How long was Simon's track?</p>  <input type="text"/>	<p>d) Alex's dad made 18 hotdogs for the family. There are six people in his family, how many hotdogs did they get each?</p>  <input type="text"/>
<p>e) The netball club were organising a tournament and needed to find kit for different teams. They had t-shirts in three different colours, and shorts in 4 different colours. How many different team kits could they make?</p>  <input type="text"/>	<p>f) Zayan was saving his pocket money to buy a second hand game for his Xbox. His parents agreed to give him £3 a week if he did the washing up and the hoovering every day. How many weeks would it take him to save £21 if he didn't spend it on anything else?</p>  <input type="text"/>

Year 4 Maths:

Have a go at these multiplication and division questions. To calculate the answers you will need to use the skills you have already been using in the classroom.

1. Recall multiplication and division up to 12×12 .

Answer the questions your teacher reads out loud. Just write the answer.

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

10 marks

.....

2. Use place value, known and derived facts to multiply and divide mentally, including: dividing by 1; multiplying together three numbers.

a) Answer the questions your teacher reads out loud. Just write the answer.

1		6	
2		7	
3		8	
4		9	
5		10	

The calculations for questions 1 and 2a can be found with the answers at the back of your booklet.

Ask someone to read out the questions to you and try to work out the answer in your head.

5 marks

b) Multiply these numbers together:

24×0	
$4 \times 6 \times 3$	
$7 \times 2 \times 8$	
125×1	
$5 \times 8 \times 3$	
$6 \times 4 \times 8$	

6 marks

c) For each multiplication, write 1 related division fact:

example:

8×7	$56 \div 7 = 8$
--------------	-----------------

6×4	
12×7	
11×9	
4×8	
9×5	
6×8	

6 marks

3. Recognise and use factor pairs and commutativity in mental calculations.

a) Two **factors** of 12 add up to 8. What are they?

1 mark

b) Tick the calculations that have the same answer to $3 \times 4 \times 5$.

$4 \times 5 \times 3$

☐

20×3

☐

$6 \times 4 \times 2$

☐

6×12

☐

$3 \times 20 \times 1$

☐

2 marks

4. Multiply 2 digit and 3 digit numbers by a 1 digit number using formal written layout.

Use written methods to complete these calculations. Show your working out:

85×3	62×4
132×5	264×3

4 marks

5. Solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.

Solve the following problems:

- a) Ella needs 20 cupcakes for her birthday party. The following shops sell them at the following prices:

Party Cakes 4 U



5 cupcakes for 40p

Cool Cupcakes



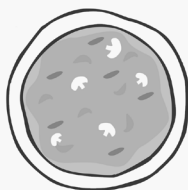
4 cupcakes for 30p

Which shop would it be cheapest to buy the cakes at? Show your working out.

2 marks

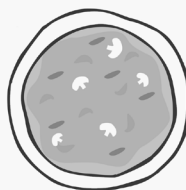
- b) She also wants to buy 6 margarita pizzas and 4 pepperoni.

Pizza House



Margarita 3 for £4
Pepperoni £2 each

Pizza Palace

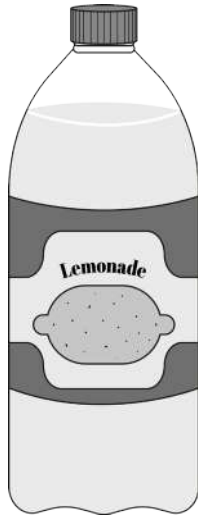


Margarita 75p each
Pepperoni 2 for £5

Which shop would it be cheapest to buy the pizzas at? Show your working out.

2 marks

- c) There are 7 guests coming to the party. She estimates that each guest, plus herself, will drink 500ml of lemonade each. How many litre bottles of lemonade will she need to buy. If each litre costs £1.50, how much will it cost altogether? Show your working out.



how many bottles of lemonade?

total cost

2 marks



Dino Dig

Volunteer Digs up Dinosaur

Sometimes, a team of scientists work together to make a huge discovery.

Sometimes, instead, a chance discovery of a tiny clue is all it takes.

Five years ago during an annual dig at a site called Eric the Red West, near Cape Otway in Australia, a volunteer digger called Jessica Parker found a small delicate fossil.

At first, it was thought to be from a **Pterosaur**. However, after looking more closely, they realised it was from something else.

It was a rare dinosaur called an Elaphrosaur, "A meat-eating dinosaur, related to Tyrannosaurus rex, Velociraptor, and modern birds," said **palaeontologist** Dr Poropat.

He went on to say, "as dinosaurs go, they were rather bizarre" because "this 'meat-eating dinosaur' probably didn't eat meat!"

As strange as this sounds it's because the few Elaphrosaur fossils that exist seem to show that as youngsters they had teeth, but as adults they had a toothless beak!

The site of the discovery shows that

When were dinosaurs alive?

- **Dinosaurs first evolved during the Triassic period (252 to 201 million years ago).**
- **What followed is called the Jurassic period (201 to 145 million years ago).**

Illustration: An Elaphrosaur.

the dinosaurs must have been able to **withstand** the cold.

The fossil was found in rocks dating from the Cretaceous period, which came after the Jurassic. At that time, Australia was still part of the Antarctic **continent**.

100 million years ago the Antarctic probably had a swampy landscape and forests like those found in New Zealand today.

Nevertheless, Elaphrosauruses would still have had to survive the dark winter months when temperatures dropped below freezing.

Glossary

Pterosaur	A prehistoric flying reptile.
palaeontologist	A scientist who studies dinosaurs.
withstand	To remain undamaged by.
continent	Any of the world's mainland masses, e.g. Europe, Asia, Africa.

Questions

1. Who discovered the bone?

2. Using information in the article, locate one example of how Antarctica has changed over the last 100 million years.

3. In the paragraph beginning “He went on to say...” which word used which means very strange or unusual?

4. From which type of dinosaur did the researchers initially think the bone came from? Tick one.

☐ Pterosaur

☐ Dinosaur

☐ Plesiosaur

5. According to the article, which dinosaurs is the Elaphrosaur related to? Tick all which apply.

☐ Stegosaurus

☐ Tyrannosaurus rex

☐ Velociraptor

6. Summarise the key information in this article using 20 words or fewer.

123

**How many times
tables questions
can you answer in
30 seconds?**



**Can you beat your
record?**

Classroom
secrets★

Give children quick fire multiplication questions from the 2, 3, 4, 5, 8 and 10 times tables.



**Go on a number
hunt.**



**Create calculations
using the numbers
you have found.**

Classroom
secrets★

Discuss different places to collect numbers. Encourage children to create addition, subtraction, multiplication and division calculations.



**Find objects to
make arrays.**



**Show each
calculation in the 8
times table.**

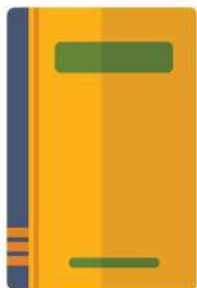
Classroom
secrets★

Discuss how the arrays add a row of 8 each time, so calculations can be answered by repeated addition → $8 + 8 + 8$ (shown above).

Practical Ideas



**Write a review
based on your
favourite book.**

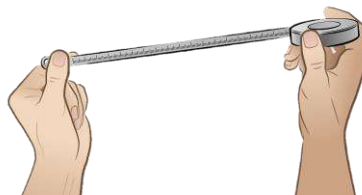


Classroom
secrets★

Encourage children to write a powerful review, using emotive language that would persuade somebody to read the book.



**Measure the
perimeter of each
room**



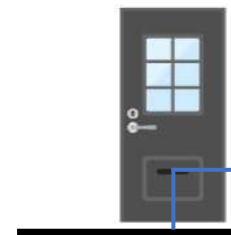
**Which room has the
greatest perimeter?**

Classroom
secrets★

Encourage children to walk around the house and predict which room has the greatest perimeter. Then, measure all sides of each room. Was their prediction correct?



**Go on a hunt for
right angles.**



**How many can you
find?**

Classroom
secrets★

Children to explore the house and find different right angles. Children could record their findings by taking photographs or writing a list.

Dissolving

Which solids dissolve in water?

You Will Need

- Water (hot and cold)
- Transparent Containers
- Substances to try and dissolve; sand, sugar, salt, coffee etc



Method

- 1 Add a teaspoon of whichever solid you are testing to a glass of cold water and a glass of hot water, stir and observe the difference.
- 2 Look to see if the solid dissolves in the hot water and cold water and if one is better than the other.
- 3 Can you design a chart to record your observation?

The Science Bit

Things like salt, sugar and coffee dissolve in water. They are soluble. They usually dissolve faster and better in hot water. Pepper and sand are insoluble, they will not dissolve even in hot water.

For Older Children

Everything is made of particles which are always moving. When a soluble solid (solute) is mixed with the right liquid (solvent), it forms a solution. This process is called dissolving.

Two things that affect the speed at which the solid dissolves are temperature and the size of the grains of the solid. Caster sugar which is made of fine particles will dissolve quickly, but bigger sugar particles will take longer.

Solids dissolve faster in hot water as in hot water the water molecules are moving faster, so bump into the solid more often which increases the rate of reaction.

Lava Lamp

You Will Need

- Water
- Vegetable Oil*
- A Clear Plastic Bottle or Jar
- Food Colouring
- Effervescent Tablets



* Please dispose of oil safely and responsibly.

Method

- 1 Fill the bottle or jar a quarter full with water.
- 2 Top up, almost to the top with the vegetable oil
- 3 They should separate into two layers, water at the bottom and oil sitting on top.
- 4 Add about 6-8 drops of food colouring once the oil and water separate.
- 5 The colour will mix with the water at the bottom.
- 6 Pop in half an effervescent tablets and watch the bubbles form. Add more effervescent tablets bit by bit to keep the bubbles rising and falling.

The Science Bit

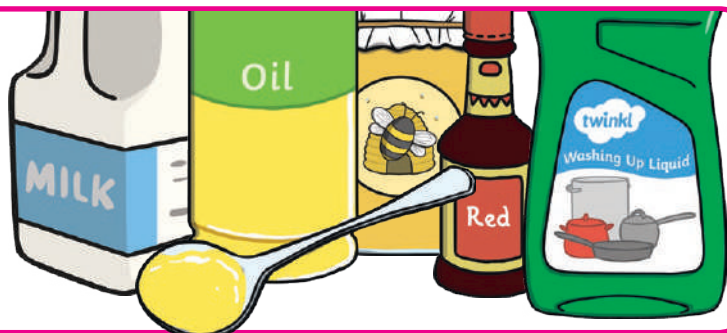
Firstly water and oil will not mix – this is because we say that water is a polar molecule – its structure means that it has a positive charge on one end and a negative charge on the other. Water molecules stick together because the positive end of one water molecule is attracted to the negative end of another. Oil molecule structure is different – it is non polar, meaning that its charge is more evenly spread out, so the oil is not attracted to water – in fact we call it hydrophobic (water fearing) so it tries to get as far away from water as possible and will not mix. The reason that oil rests on top of the water rather than underneath is because it has a different density to water.

As the effervescent tablets are added (this is made of citric acid and sodium bicarbonate) it reacts with the water and forms carbon dioxide gas and sodium citrate. It is the carbon dioxide bubbles that carry the coloured water to the top.

Fun with Density

You Will Need

- Honey
- Vegetable oil*
- Milk
- Food colourings
- Water
- Golden syrup
- A Glass
- Washing up liquid



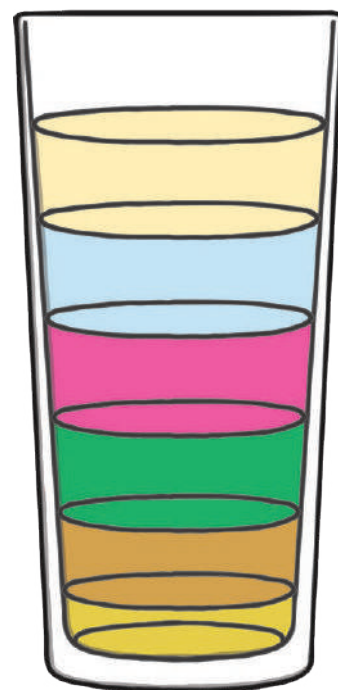
* Please dispose of oil safely and responsibly.

Density is a really tough concept to grasp. We confuse ourselves by referring to our weight all the time when we really mean our **mass**. **Mass** is effectively 'how much stuff' is there. **Density** is how much mass is in a volume (or space).

One way to illustrate density is to pour different liquids (which have different densities) on top of each other. The liquids with the greatest density sink to the bottom.

Method

- 1 Measure out the same volume of each of the liquids. Colour the water and the milk if you wish.
- 2 Starting from the bottom, pour in the honey. Make sure it goes into the middle of the glass and that you don't get any honey on the sides.
- 3 Slowly pour the golden syrup on top, followed by the washing up liquid.
- 4 Then add the milk, followed by the water.
- 5 Finally top with vegetable oil and admire your rainbow glass!



The Science Bit

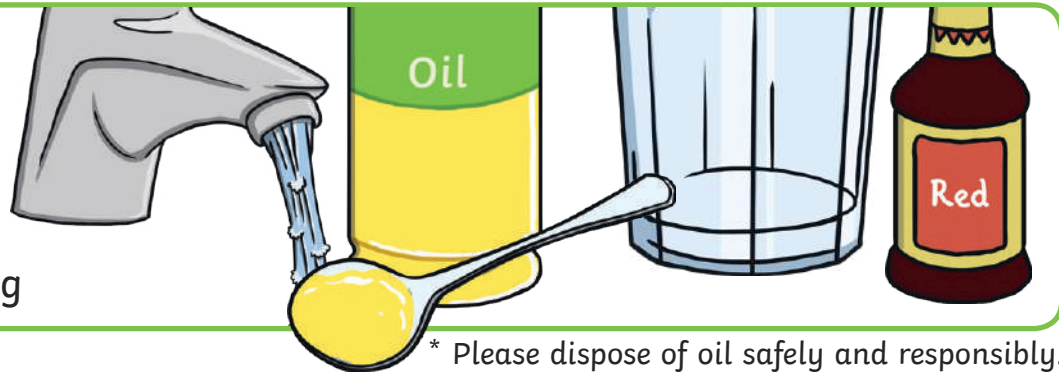
Each of the liquids have a different mass of molecules or different numbers of parts squashed into the same volume of liquid, this makes them have different densities and therefore one can sit on top of the other – the more dense a liquid is the heavier it is.

Do you think you could float small objects on each of the different levels? We'd love to see a photo if you can.

Fireworks in a Glass

You Will Need

- Warm Water
- Oil*
- A Tall Glass
- Food Colouring



* Please dispose of oil safely and responsibly.

This is a very cool, simple and fun experiment, and also completely safe, just don't drink the water!

Method

- 1 Fill the tall glass with warm water.
- 2 Pour a small amount of oil into another container and add a few drops of food colouring.
- 3 Give it a good stir, if it doesn't mix, add a bit of water.
- 4 Pour the food colouring and oil mixture into the warm water and watch the fireworks!

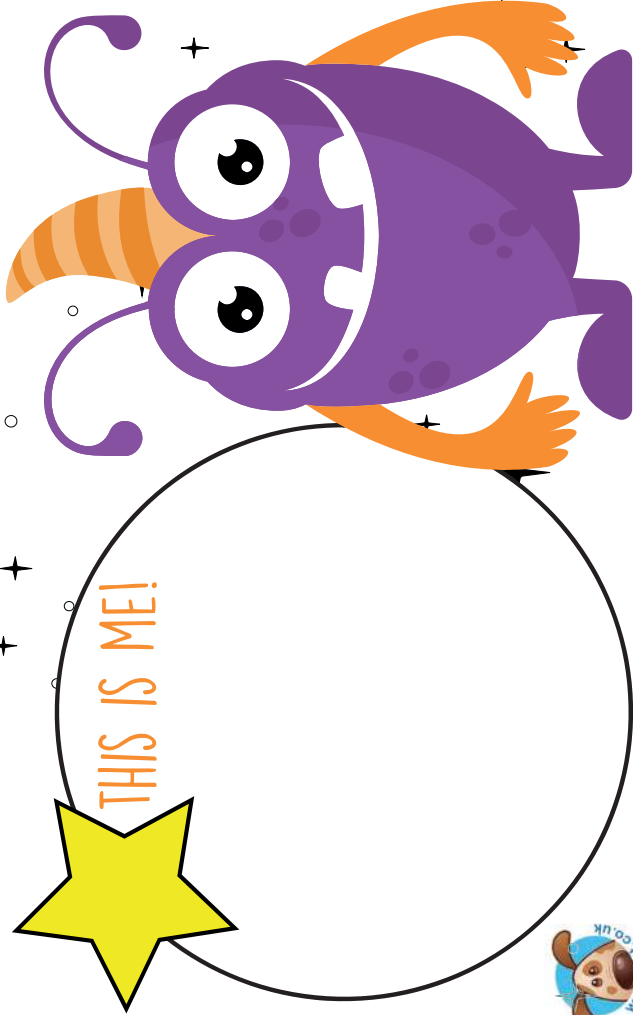
The Science Bit

Oil and water don't mix. Also oil is less dense than water (meaning there is less of it in the same volume) and therefore floats on top of water in a nice layer. The food colouring we used was water based and therefore does not mix with the oil, instead it sinks through the oil into the water below. Since the addition of the colouring makes the food colouring heavier than the water, it sinks to the bottom leaving trails (resembling fireworks) as some of the colour diffuses into the water.

BE PROUD OF YOURSELF!

#WellbeingWednesday

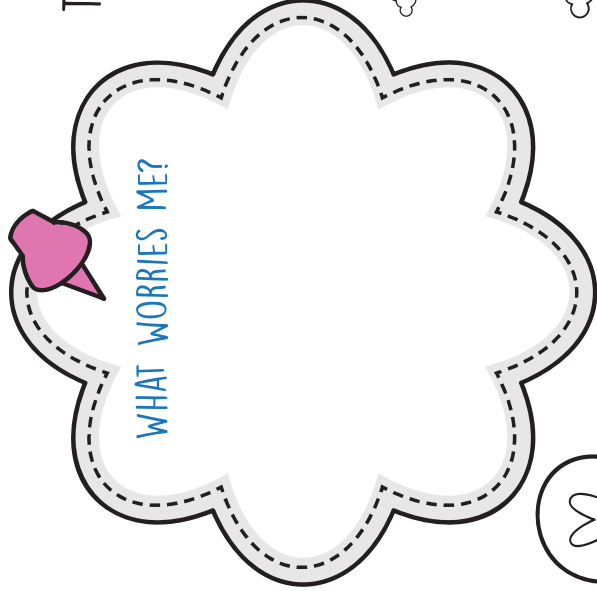
TWO THINGS I AM PROUD I CAN DO:



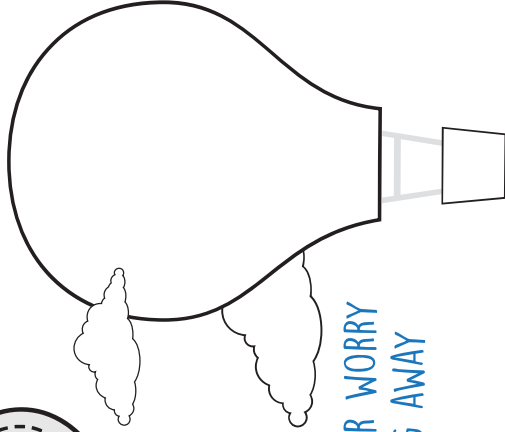
DON'T WORRY ABOUT IT!

#WellbeingWednesday

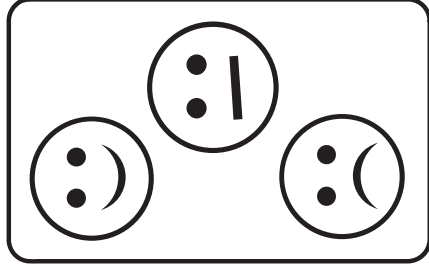
TALKING TO OTHERS
CAN HELP WITH
YOUR WORRIES



DRAW YOUR WORRY
FLOATING AWAY




HOW DO I FEEL TODAY?



☆ TAKE TIME TO BREATHE!

THINGS I CAN CONTROL...



THINGS I CAN'T CONTROL...




INHALE

I CAN CONTROL
HOW I TREAT
OTHERS



I CAN CONTROL
MY OWN
BEHAVIOUR



THE WEATHER
CANNOT BE
CONTROLLED



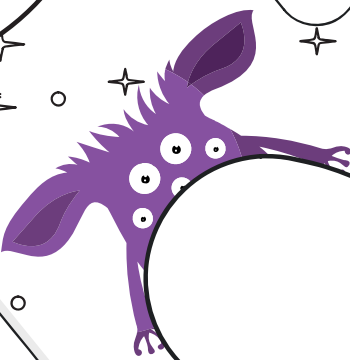
WHAT OTHERS
THINK OF YOU
CANNOT BE
CONTROLLED

NOBODY IS PERFECT!

#WellbeingWednesday



INSTEAD OF SAYING
I CAN'T DO THIS,
I WILL SAY..



INSTEAD OF SAYING
NO I'M BUSY!
I WILL SAY...



INSTEAD OF SAYING
I DON'T KNOW,
I WILL SAY...



WE ALL NEED A FRIEND

#WellbeingWednesday



FRIENDS ARE IMPORTANT BECAUSE...



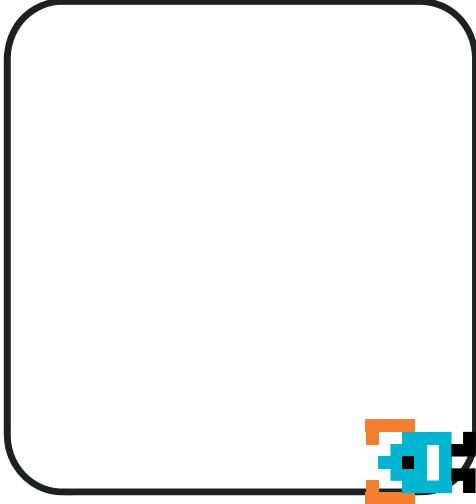
STAR QUALITIES
OF A GOOD
FRIEND



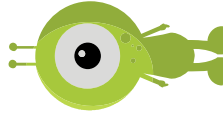
MY FRIENDS
ARE GREAT!



WE CAN BE A GOOD FRIEND BY...



SOMETIMES ALL IT
TAKES TO MAKE
A NEW FRIEND IS
A SIMPLE
HELLO!

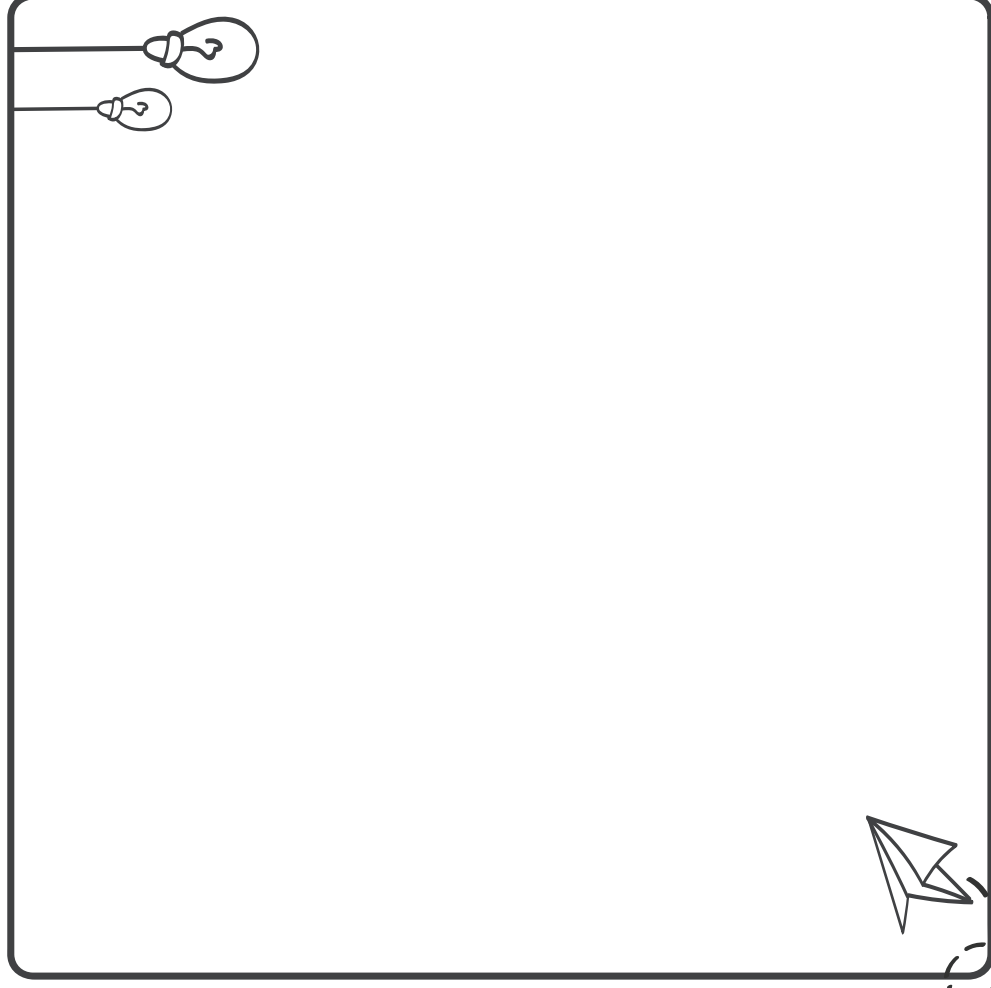


BE CREATIVE

#WellbeingWednesday

Create an invention that
everybody would love!

MY INVENTION IS...



FOCUS YOUR MIND

#wellbeingWednesday

FOCUS ON YOUR SURROUNDINGS BY USING YOUR SENSES



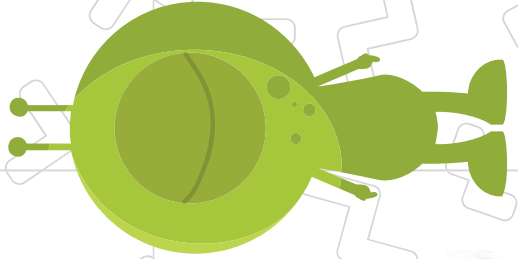
WHAT DO YOU SEE?



WHAT CAN YOU HEAR?



WHAT CAN YOU TOUCH?



WHAT CAN YOU SMELL?

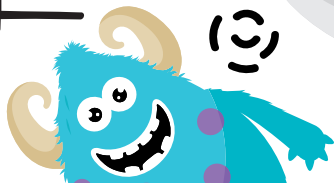
USE THIS TECHNIQUE WHENEVER YOU NEED TO TAKE A MOMENT TO CALM DOWN



THOUGHTS AREN'T FACTS!

#wellbeingWednesday

WHAT DOES YOUR BRAIN CONTAIN?
WRITE YOUR EMOTIONS OR FEELINGS



HAPPY
BRAIN



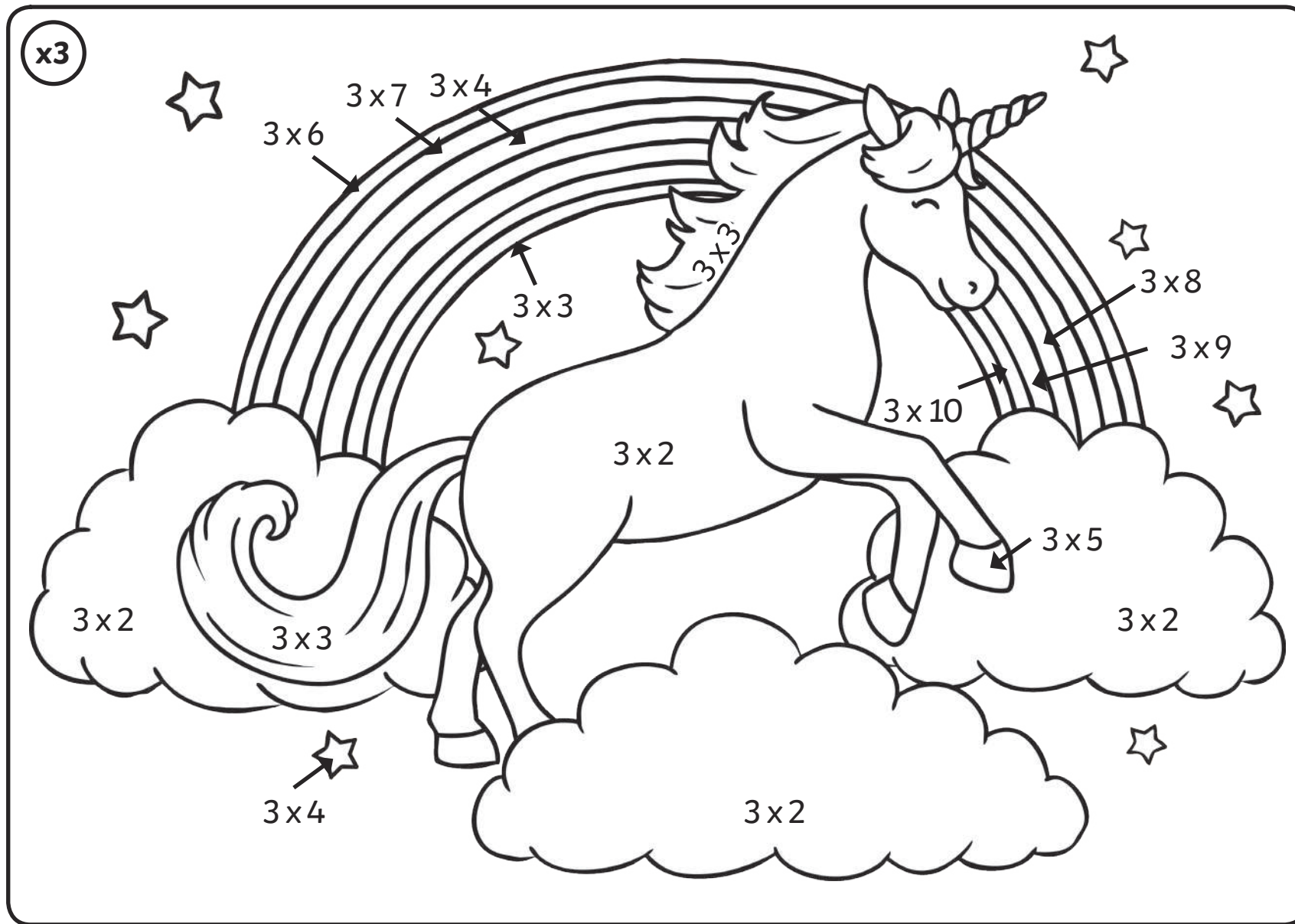
ANXIOUS
BRAIN



WHAT COLOURS WOULD THE TWO DIFFERENT BRAINS BE?

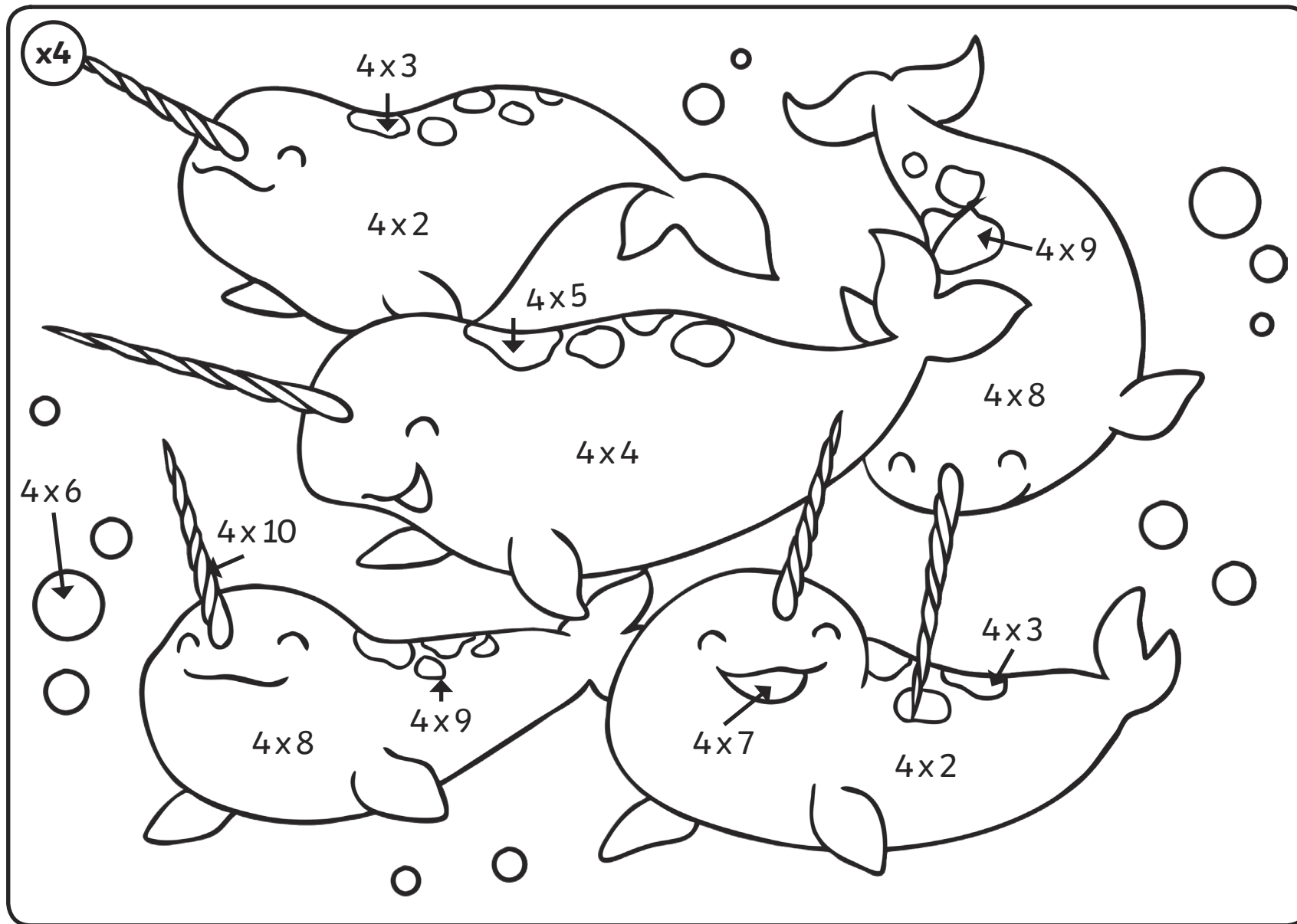
4	grey
6	light green
8	dark green
10	pink
12	orange
14	skin colour
16	bright pink
18	black

Colour by Multiplication



6	white
9	light pink
12	yellow
15	peach
18	red
21	orange
24	green
27	blue
30	purple

Colour by Multiplication



8	grey
12	turquoise
16	bright blue
20	dark blue
24	light blue
28	pink
32	light green
36	dark green
40	light brown

Answers

Use your **green** and **pink** highlighters to check your answers just like you would in the classroom.



If an answer is not correct, look again at your question so you understand what mistake you have made.

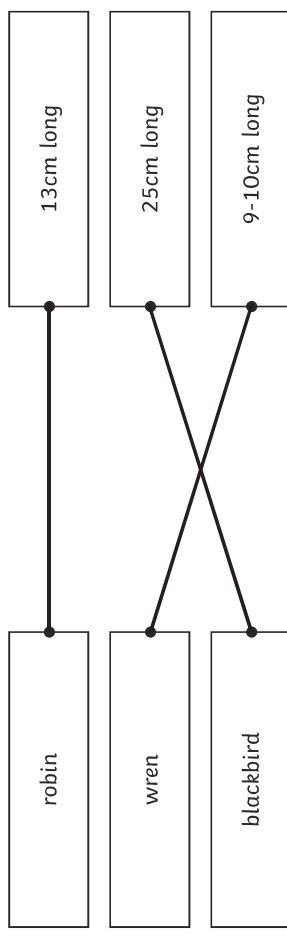
Answers

1. How many eggs will robins lay? Tick one.

4-6

- ☐ 5-8
☐ 9-10
☐ 13

2. Draw three lines to match each bird to their size.



3. What is the smallest native bird in the UK?

The goldcrest is the smallest native bird in the UK.

4. Fill in the missing words:

Nightingales are not always **resident** in the UK but are special **summer** visitors to parts of **southern** England.

5. Find and copy a word from the **Threats to Garden Birds and How You Can Help** section which means the same as **crash into**.
collide

6. Who do you think that the author has written the text for?

Pupils' own responses, such as: I think the author has written the text for children who are interested in wildlife and who would like to try to help protect garden birds.

7. Explain how you could help British garden birds.

Pupils' own responses, such as: I could ask my dad to replace the nets over our flowers for a fine mesh so that birds don't become tangled.

8. Which of the birds mentioned would you most like to see? Give at least **two** reasons.

Pupils' own responses, such as: I would most like to see a wren because I have never seen one even though they are Britain's most common bird. I would also like to see just how tiny they are.

Year 3 Maths (part 1): Answers

question	answer	marks	notes
1. Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers.			
a	5, 17, and 29 on the shelf and 8, 14, and 36 in the bin	2	2 marks for all correct and 1 mark if there is 1 mistake
b	$5 \times 10 = 50$ $7 \times 5 = 35$ $40 \div 5 = 8$ half of 24 = 12 double 8 = 16 $100 \div 10 = 10$ $12 \times 5 = 60$ $9 \times 2 = 18$ $14 \div 2 = 7$	9	
2. Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs.			
	seeds: $6 \times 10 = 60$ or $10 \times 6 = 60$ sweets: $60 \div 5 = 12$	2	2 marks. One for each correct number sentence
3. Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot.			
	$5 \times 3 = 15$ $3 \times 5 = 15$ $15 \div 3 = 5$ $15 \div 5 = 3$	4	One for each different, correct sentence
4. Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.			
	Sweets: 60 Treats: 12 Buses: 12	3	3 marks one for each correct problem
		Total 20	

Year 3 Maths (part 2): Answers

question	answer	marks	notes				
1. Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.							
	<div><div><div>4</div><div>$\div 4 = 16$</div></div><div><div>8</div><div>$\div 2 = 24$</div></div></div> <div><div><div>21</div><div>$\div 3 = 7$</div></div><div><div>4</div><div>$\div 32$</div></div></div>	6	Award 1 mark for each correct answer.				
2. Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods.							
a	<table><tr><td>12</td><td>20</td></tr><tr><td>120</td><td>200</td></tr></table>	12	20	120	200	4	Award 1 mark for each correct answer.
12	20						
120	200						
b	<table><tr><td>56</td><td>78</td></tr><tr><td>23</td><td>18</td></tr></table>	56	78	23	18	4	Award 1 mark for each correct answer. Do not award a mark if no written method has been shown.
56	78						
23	18						
3. Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects.							
a	150 cm or 1.5 m	1	Accept 150 without units but not 1.5.				
b	6	1					
c	88m	1					
d	3	1					
e	12	1					
f	7	1					
		Total 20					

Year 4 Maths: Answers

1. Questions for teacher to read aloud. Read each question twice and leave 5 seconds for the pupils to answer. Children should just write down the answer.

1	6 x 9	6	9 x 8	11	7 x 12	16	4 x 8
2	32 ÷ 8	7	12 x 12	12	81 ÷ 9	17	7 x 7
3	7 x 5	8	40 ÷ 8	13	8 x 6	18	60 ÷ 12
4	11 x 9	9	3 x 7	14	80 ÷ 8	19	8 x 7
5	36 ÷ 6	10	45 ÷ 9	15	9 x 0	20	42 ÷ 7

2. Tell the children to use the multiplication facts they already know and place value to answer the following questions. Read each question twice and leave 10 seconds for them to write the answer.

1	80 x 5	6	7 x 20
2	5 x 40	7	540 ÷ 9
3	210 ÷ 3	8	500 x 7
4	60 x 6	9	80 x 30
5	240 ÷ 8	10	30 x 60

question	answer	marks	notes
1. Recall multiplication and division up to 12 x 12.			
	1. 54 2. 4 3. 35 4. 99 5. 6 6. 72 7. 144 8. 5 9. 21 10. 5 11. 84 12. 9 13. 48 14. 10 15. 0 16. 32 17. 49 18. 5 19. 56 20. 6	up to 10 marks	1 or 2 correct = 1 mark 3 or 4 correct = 2 marks 5 or 6 correct = 3 marks 7 or 8 correct = 4 marks 9 or 10 correct = 5 marks 11 or 12 correct = 6 marks 13 or 14 correct = 7 marks 15 or 16 correct = 8 marks 17 or 18 correct = 9 marks 19 or 20 correct = 10 marks
2. Use place value, known and derived facts to multiply and divide mentally, including: dividing by 1; multiplying together three numbers.			
a	1. 400 2. 200 3. 70 4. 360 5. 30 6. 140 7. 60 8. 3500 9. 2400 10. 1800	up to 5 marks	1 or 2 correct = 1 mark 3 or 4 correct = 2 marks 5 or 6 correct = 3 marks 7 or 8 correct = 4 marks 9 or 10 correct = 5 marks
b	I. 0 II. 72 III. 112 IV. 125 V. 120 VI. 192	up to 6 marks	Award one mark for each correct answer.
c	I. 24÷6=4 or 24÷4=6 II. 84÷12=7 or 84÷7=12 III. 99÷11=9 or 99÷9=11 IV. 32÷4=8 or 32÷8=4 V. 45÷9=5 or 45÷5=9 VI. 48÷6=8 or 48÷8=6	up to 6 marks	Award one mark for each correct answer.
3. Recognise and use factor pairs and commutativity in mental calculations.			
a	6 and 2	1	Accept them in any order
b	$4 \times 5 = 20$ ✓ $20 \times 3 = 60$ ✓ $6 \times 4 = 24$ □ $5 \times 12 = 60$ □ $3 \times 20 = 60$ ✓	up to 2 marks	Score 2 marks for all 3 correct, with no others marked with a tick. Score 1 mark for 2 correct, with no others marked with a tick.
4. Multiply 2 digit and 3 digit numbers by a 1 digit number using formal written layout.			
	$85 \times 3 = 255$ $132 \times 5 = 660$ $62 \times 4 = 248$ $264 \times 3 = 792$	up to 4 marks	Award 1 mark for each correct answer, but must show working out.

Answers

1. Who discovered the bone?
a volunteer called Jessica Parker

2. Using information in the article, locate one example of how Antarctica has changed over the last 100 million years.
Accept an answer which references that Antarctica was a swampy landscape with forests but is now an ice-covered land or that Australia used to be a part of the Antarctic continent.

3. In the paragraph beginning “He went on to say...” which word used which means very strange or unusual?
Bizarre

4. From which type of dinosaur did the researchers initially think the bone came from? Tick one.

☒ **Pterosaur**

☐ Dinosaur

☐ Plesiosaur

5. According to the article, which dinosaurs is the Elaphrosaur related to? Tick all which apply.

☐ Stegosaurus

☒ **Tyrannosaurus rex**

☒ **Velociraptor**

6. Summarise the key information in this article using 20 words or fewer.
Accept a reasonable answer which includes the story's key information in 20 words or fewer, e.g. A volunteer discovered a rare dinosaur in Australia. The part of Australia used to be part of Antarctica.

question	answer	marks	notes
5. Solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit; integer scaling problems and harder correspondence problems such as n objects are connected to m objects.			
a	Cool Cupcakes	Up to 2 marks	Score 2 marks for Cool Cupcakes, or an indication that this shop was the cheapest (arrow / circle) Award 1 mark for a correct method but a calculation error.
b	Pizza palace	Up to 2 marks	Score 2 marks for Pizza Palace or an indication that this shop was the cheapest (arrow / circle) Award 1 mark for a correct method but a calculation error.
c	4 bottles £6	Up to 2 marks	Score 1 mark for each part of the question. If the number of bottles is incorrect, score 1 mark for calculating the correct cost of the bottles based on the previous answer.
		Total	40