YEAR 6

HOME LEARNING

Oldbury Park PRIMARY RSA ACADEMY

Hello, Year 6!
Congratulations! You completed SATSs week!
We hope you enjoyed our SATs activities and even though they weren't the real thing, you can now say that you have done your SATs! You may have seen on Twitter our #ToastTimeChallenge where we wanted you to guess whose toast belonged to which teacher! Well done if you got it right. We hope you all took part in Julie's Toast Time to experience SATs week fully.
We know it's getting hard to stay at home and be away from your friends and families but you're all doing a great job of learning at home. Seeing your friends and families for your celebration party last Friday was a great way to bring everyone back together. This week, we're going back to our normal format of activities - keep up the hard work and remember, doing a little bit every day will keep your brains active and ready for September.
Miss Moule Miss Hill Julie

EVERY DAY

Daily Maths lessons - https://whiterosemaths.com/homelearning/year-6/ (Summer term Week 3 w/c 4th May) We are a little behind the WR maths schemes but please try to stick to the weeks we plan. If you have already completed this week, please go back to a week you haven't done.
Watch the video and then complete the written task (some of these need printing). This is 30-40 minutes work. **This week is Fractions.** There is no video or activity for FRIDAY, there are enough activities to continue to do 2 sheets per day.
We have also created an arithmetic daily practice sheet (week 2). Complete 1 box of 8 questions per day. You can find this on the website, near this sheet.
Mathletics – 15-20 minutes (more if you wish).
Read for at least 30 minutes.

CGP BOOKS (across the whole week)
Maths – Pages 29-34 (after completing White Rose Tasks). This is for all 3 math's groups. And pages 74-80.

English – Section 4 and pages 20-21

SURVIVAL OF THE FITTEST! Additional tasks for this week (18/5/20)

English

Monday
Research! Continuing with our Survival of the Fittest topic, we are going to be looking into Inheritance. What does this word mean? Use this PowerPoint and video to help you.
https://www.twinkl.co.uk/resource/tp2-s-112-new-planit-science-year-6-evolution-and-inheritance-lesson-1-inheritance-lesson-pack
https://www.bbc.co.uk/bitesize/topics/zvhhvcw/articles/zp9f4qt Make some notes to help you for the rest of the week's learning.
SPAG - https://www.twinkl.co.uk/go/resource/year-6-special-agent-training-exercises-punctuation-and-grammar-game-tg-ga-194

Tuesday
SPAG - CGP Book pages 42-45
Reading Comprehension – Giant turtle fossil. https://www.twinkl.co.uk/resource/uks2-giant-turtle-fossil-found-daily-news-resource-pack-t-wn-1132

Wednesday
Using your family tree to help you, use the template below or draw yourself in the middle of a page to annotate any similar features you have with any of your relatives! You could annotate the features you have inherited from your parents in one colour and other features from other relatives in another colour. Do you have features that are more similar with your parents? Why or why not? Why do we inherit characteristics from our parents? Why don't we look exactly the same as our parents or siblings? Think about these questions and discuss them with your family.

Thursday
Choose a family member you are most interested in finding out about. Use photos and information from your family to create a history page of writing and pictures all about them. You can present it in any way you want!

Friday
SPAG CGP Book pages 46-51
Reading Comprehension CGP Book pages 20-21

TOPIC

French – Telling the time! Use this website to help you:

https://www.twinkl.co.uk/resource/tp2-l-160-planit-french-year-6-all-in-a-day-lesson-1-oclock-half-past-quarter-past-quarter-to-lesson-pack
Then, have a go at creating this clock to tell the time. All you need is 2 paper plates or cut out 2 circles of paper.

Science – Create a family tree, if possible using photos of your relatives. It's up to you how far back you go to investigate your family's ancestors. You can use paper or create one using a computer.

Computing –Algorithms and debugging! https://www.bbc.co.uk/bitesize/articles/zhdr47h

Daily Practice – 1

1) 7699 + 1352 =
2) 1298.3 – 445 =
3) 12 x 36 =
4) 526 / 7 =
5) 1/3 + 2/5 =
6) 39% as a decimal =
7) 4.36 x 100 =
8) 16 x 3 - 12 =

Daily Practice – 2

1) 369.3 + 7665 =
2) 2243 – 1377 =
3) 341 x 12 =
4) 333 / 13 =
5) 3/5 + 2/4 =
6) 1.46 as a fraction =
7) 0.347 / 10 =
8) 12 x 2 x 3 =

Daily Practice – 3

1) 5689 + 1412 =
2) 22.6 – 16.03 =
3) 13 x 25 =
4) 4682 / 9 =
5) 7/9 + 3/5 =
6) 27/100 as a percentage =
7) 1.321 x 100 =
8) 6 squared + 8 x 2 =

Daily Practice – 4

1) 128.6 + 742.3 =
2) 588 – 455.4 =
3) 59 x 15 =
4) 2585 / 11 =
5) 9/10 + 1/4 =
6) 52/100 as a decimal =
7) 0.358 / 100 =
8) 7 x 6 / 3 =

Daily Practice – 5

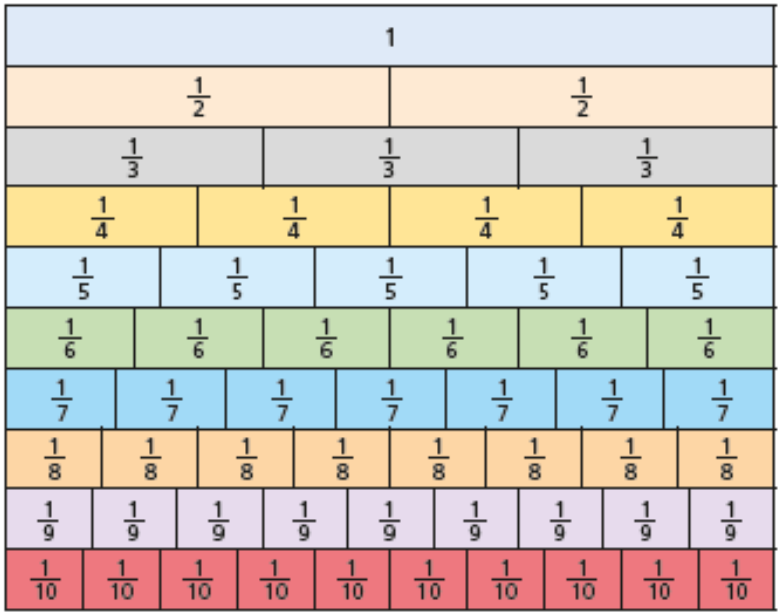
1) 88.08 + 57.5 =
2) 852 – 135 =
3) 52 x 14 =
4) 1682 / 16 =
5) 4/7 + 4/6 =
6) 96% as a fraction =
7) 0.035 x 1000 =
8) 8 x 12 x 2 =

Daily Practice – 6

1) 3102 + 364.2 =
2) 42.01 – 13.4 =
3) 852 x 15 =
4) 4389 / 8 =
5) 8/10 + 4/6 =
6) 0.71 as a percentage =
7) 168 / 100 =
8) 8 squared + 4 x 3 =

Simplify fractions

1



Use the fraction wall to write each fraction in its simplest form.

a) $\frac{4}{6} = \square$

b) $\frac{8}{10} = \square$

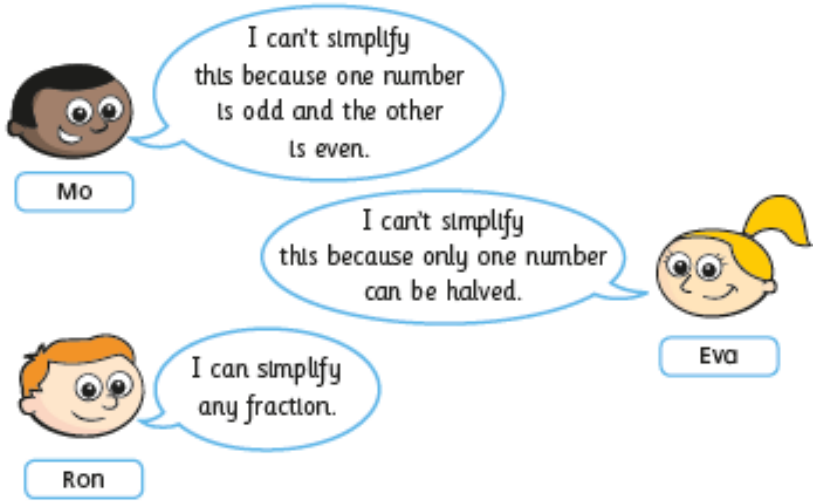
c) $\frac{6}{8} = \square$

d) $\frac{4}{8} = \square$

2 a) Use a fraction wall to explain why $\frac{7}{10}$ does not simplify.

b) Find three more fractions on the fraction wall that cannot be simplified.

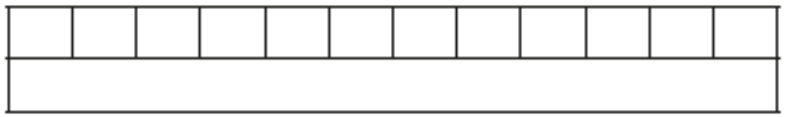
3 Mo, Eva and Ron are trying to simplify $\frac{5}{20}$



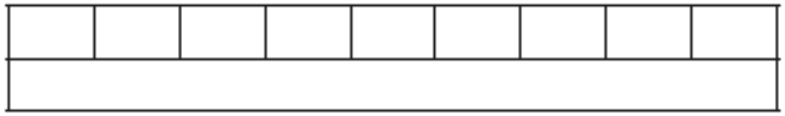
Do you fully agree, partly agree or completely disagree with each person?

Talk to a partner.

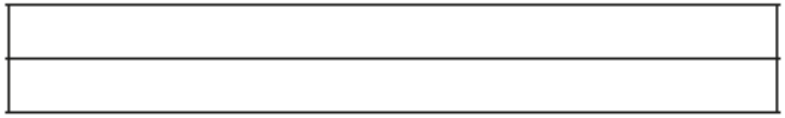
4 a) Draw lines on the bar model to show that $\frac{9}{12}$ is equal to $\frac{3}{4}$



b) Complete each bar model and calculation.



$\square = \frac{3}{9}$



$\square = \frac{5}{15}$

5 Simplify the fractions.

a) $\frac{4}{12} = \square$ b) $\frac{8}{12} = \square$ c) $\frac{40}{120} = \square$ d) $\frac{12}{4} = \square$

$\frac{4}{16} = \square$ $\frac{8}{16} = \square$ $\frac{40}{160} = \square$ $\frac{120}{4} = \square$

$\frac{4}{20} = \square$ $\frac{8}{20} = \square$ $\frac{40}{200} = \square$ $\frac{12}{400} = \square$

Describe and explain any patterns that you noticed.

_____

6 Write 3 fractions that simplify to $\frac{3}{5}$

$\square$ $\square$ $\square$

7 Teddy and Dora are both simplifying $\frac{30}{42}$

Teddy

$\frac{30}{42} = \frac{15}{21} = \frac{5}{7}$

Dora

$\frac{30}{42} = \frac{5}{7}$

a) How do you think Dora was able to simplify the fraction in one step?

b) Simplify these fractions in one step.

$\frac{24}{30} = \square$ $\frac{16}{20} = \square$

$\frac{56}{64} = \square$ $\frac{99}{121} = \square$

8 ☆/♥ ★ is a prime number. ♥ is a multiple of 10

The fraction can be simplified.

What could each number be? Explain your reasoning.

_____

_____

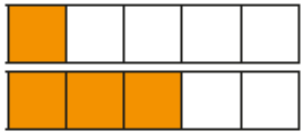
_____

_____

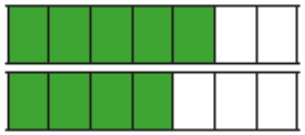
Compare and order (denominator)

1 Write <, > or = to compare the fractions.

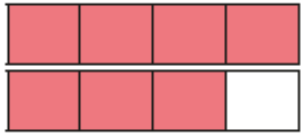
Use the bar models to help you.

a) 

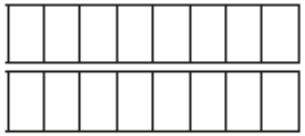
$\frac{1}{5}$ ◯ $\frac{3}{5}$

b) 

$\frac{5}{7}$ ◯ $\frac{4}{7}$

c) 

$\frac{4}{4}$ ◯ $\frac{3}{4}$

d) 

$\frac{3}{8}$ ◯ $\frac{7}{8}$

e) 

$\frac{4}{9}$ ◯ $\frac{6}{9}$

f) What do you notice about your answers?

g) Complete the sentence.

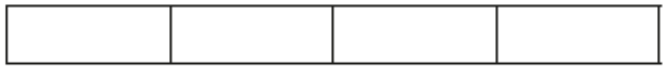
When the denominators are the same, the _____ the numerator, the _____ the fraction.

2 a) Colour the bar models to show the fractions.

$\frac{14}{20}$ 

$\frac{9}{10}$ 

$\frac{4}{5}$ 

$\frac{3}{4}$ 

b) Use the bar models to sort these fractions in order from greatest to smallest.

$\frac{14}{20}$ $\frac{9}{10}$ $\frac{4}{5}$ $\frac{3}{4}$

greatest _____ _____ smallest

c) Order the fractions from smallest to greatest.

$\frac{7}{10}$ $\frac{1}{2}$ $\frac{2}{5}$ $\frac{3}{10}$

smallest _____ _____ greatest

3 Amir is comparing the fractions $\frac{4}{15}$ and $\frac{3}{10}$

$\frac{4}{15} = \frac{8}{30}$ $\frac{3}{10} = \frac{9}{30}$

$\frac{9}{30}$ is greater than $\frac{8}{30}$

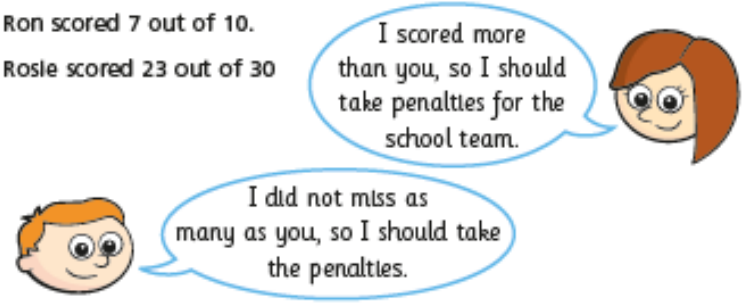
$\frac{3}{10}$ is greater than $\frac{4}{15}$

Explain Amir's method.

4 Ron and Rosie are practising penalties.

Ron scored 7 out of 10.

Rosie scored 23 out of 30



Compare fractions to explain who should take penalties for the school team.

5 Write <, > or = to compare the fractions.

a) $\frac{3}{4}$ ◯ $\frac{5}{6}$

b) $\frac{2}{3}$ ◯ $\frac{5}{9}$

c) $\frac{2}{3}$ ◯ $\frac{7}{8}$

d) $\frac{3}{5}$ ◯ $\frac{5}{7}$

e) $\frac{9}{10}$ ◯ $\frac{3}{4}$

f) $\frac{9}{10}$ ◯ $\frac{19}{20}$

6 Annie, Tommy and Kim are making flags for the school fair.

Annie has completed $3\frac{3}{4}$ flags, Tommy has completed $3\frac{2}{3}$ flags and Kim has completed $\frac{18}{5}$ flags.

Who has completed the most flags?

Compare and order (numerator)

1 Use strips of paper to represent the fractions and complete the sentences.

a) $\frac{1}{3}$, $\frac{1}{5}$ and $\frac{1}{6}$

The smallest fraction is ☐ The greatest fraction is ☐

b) $\frac{2}{3}$, $\frac{2}{5}$ and $\frac{2}{6}$

The smallest fraction is ☐ The greatest fraction is ☐

c) $\frac{3}{3}$, $\frac{3}{5}$ and $\frac{3}{6}$

The smallest fraction is ☐ The greatest fraction is ☐

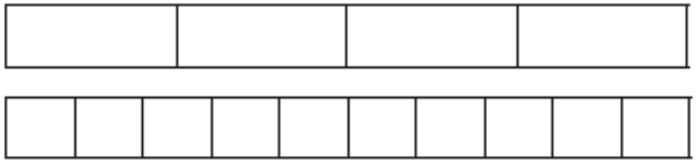
d) What do you notice about your answers?

e) Complete the sentence.

When the _____ are the same, the _____

the denominator, the _____ the fraction.

2 a) Colour the bar models to compare $\frac{3}{4}$ and $\frac{6}{10}$



b) Write <, > or = to complete the statement.

☐ ○ ☐

3 Which is the greatest fraction? Circle your answer.

$\frac{3}{100}$ $\frac{3}{1000}$ $\frac{3}{500}$

How do you know?

4 Write < or > to compare the fractions.

a) $\frac{1}{7}$ ○ $\frac{1}{9}$

b) $\frac{4}{5}$ ○ $\frac{4}{7}$

c) $\frac{3}{13}$ ○ $\frac{3}{8}$

d) $\frac{11}{12}$ ○ $\frac{11}{11}$

e) $\frac{19}{5}$ ○ $\frac{19}{6}$

f) $\frac{107}{53}$ ○ $\frac{107}{40}$

5 Explain how can you compare $\frac{2}{3}$ and $\frac{4}{5}$ using the same numerator rule.

Complete the sentence to compare $\frac{2}{3}$ and $\frac{4}{5}$

☐ is greater than ☐

6 Scott scored 20 out of 24 in a game.

Dani scored 5 out of 7

Compare their scores.

Explain who you think did best and why.

7 Write <, > or = to complete each statement.

a) $\frac{2}{5}$ ◯ $1\frac{1}{3}$ b) $\frac{2}{5}$ ◯ $\frac{6}{11}$ c) $3\frac{2}{3}$ ◯ $\frac{11}{4}$

$1\frac{2}{5}$ ◯ $\frac{1}{3}$ $1\frac{2}{5}$ ◯ $3\frac{6}{11}$ $11\frac{2}{9}$ ◯ $\frac{101}{3}$

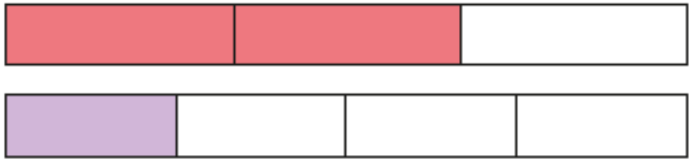
$1\frac{2}{5}$ ◯ $1\frac{1}{3}$ $3\frac{2}{5}$ ◯ $3\frac{6}{11}$ $11\frac{1}{9}$ ◯ $\frac{100}{8}$

$\frac{12}{5}$ ◯ $\frac{12}{3}$ $\frac{12}{5}$ ◯ $\frac{36}{11}$ $27\frac{3}{4}$ ◯ $\frac{111}{3}$

8 Explain how you know when it is best to compare the numerators or denominators of two fractions.

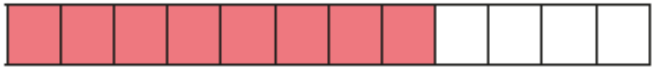
Add and subtract fractions (2)

1 Amir is using fraction strips to work out $\frac{2}{3} + \frac{1}{4}$

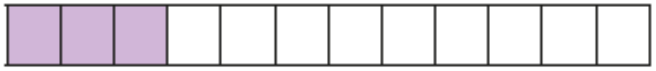


Amir says he needs to find a common denominator.

a) Complete Amir's method.



$\frac{2}{3} = \frac{\square}{12}$



$\frac{1}{4} = \frac{\square}{12}$

$\frac{2}{3} + \frac{1}{4} = \frac{\square}{12} + \frac{\square}{12} = \frac{\square}{12}$

b) Show the addition on the fraction strip.

c) Could you have used a different denominator?

2 What common denominator can you use to add the fractions?

a) $\frac{2}{5} + \frac{1}{2}$ Common denominator = $\square$

b) $\frac{2}{3} + \frac{4}{5}$ Common denominator = $\square$

c) $\frac{7}{8} - \frac{1}{4}$ Common denominator = $\square$

d) $\frac{7}{9} - \frac{1}{6}$ Common denominator = $\square$

e) $\frac{11}{15} + \frac{3}{10}$ Common denominator = $\square$

3 Ron and Eva are working out $\frac{1}{4} + \frac{5}{6}$

Ron's method

$\frac{1}{4} + \frac{5}{6} = \frac{3}{12} + \frac{10}{12} = \frac{13}{12}$

Eva's method

$\frac{1}{4} + \frac{5}{6} = \frac{6}{24} + \frac{20}{24} = \frac{26}{24}$

a) What is the same about Ron's and Eva's methods?

b) What is different about their methods?

c) Which method do you prefer? Why?

4 Complete the calculations.

a) $\frac{1}{5} + \frac{3}{4} =$ ☐

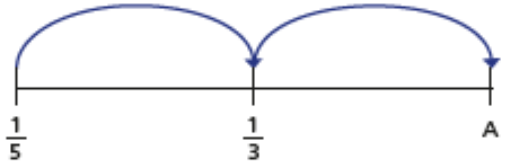
b) $\frac{7}{8} - \frac{1}{3} =$ ☐

c) $\frac{1}{2} - \frac{1}{7} =$ ☐

d) $\frac{11}{18} + \frac{7}{12} =$ ☐

5 Mo is drawing jumps on a number line.

The jumps are the same size.



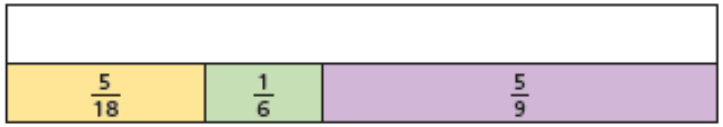
a) What is the size of the jump?

☐

b) What is the value of A?

☐

6 Complete the bar model.



7 Complete the additions.

Give your answers as mixed numbers and as improper fractions.

a) $\frac{4}{5} + \frac{5}{4} =$ ☐ $=$ ☐

b) $\frac{2}{3} + \frac{3}{2} =$ ☐ $=$ ☐

c) $\frac{9}{8} + \frac{8}{9} =$ ☐ $=$ ☐

d) ☐ $=$ ☐ $= \frac{5}{3} + \frac{3}{5}$

What patterns do you notice?

8 Look at these additions.

$\frac{1}{2} + \frac{1}{3} =$ ☐

$\frac{1}{2} + \frac{1}{3} + \frac{1}{4} =$ ☐

$\frac{1}{2} + \frac{1}{3} + \frac{1}{4} + \frac{1}{5} =$ ☐

a) When does this pattern first give an answer greater than 2?

b) Do you think the pattern will ever give an answer greater than 100?

Mixed addition and subtraction

1 Work out the calculations.

a) $\frac{2}{5} + \frac{3}{4} = \square$

b) $2\frac{1}{4} - \frac{2}{3} = \square$

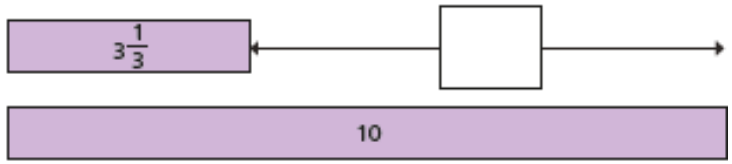
c) $3\frac{7}{10} - 2\frac{1}{4} = \square$

2 Complete the calculation.

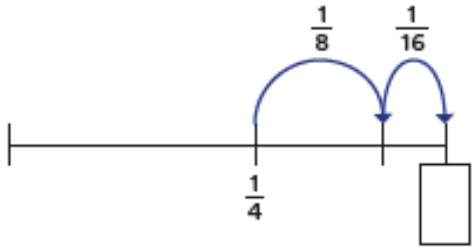
$\frac{5}{6} + 1\frac{2}{9} - \frac{1}{2} = \square$

3 Work out the missing fractions.

a)



b)



4 Complete the calculations.

a) $\frac{2}{5} + \frac{1}{5} + \square = 1$

b) $\frac{2}{5} + \frac{1}{5} + \square = 1\frac{1}{2}$

c) $\frac{2}{5} + \frac{1}{5} + \square = \frac{4}{3}$

d) $\frac{4}{5} = \square - \frac{4}{5}$

5 Which of these are true and which are false?

Can you decide without having to do the additions or the subtractions?

Talk about your reasons with a partner.

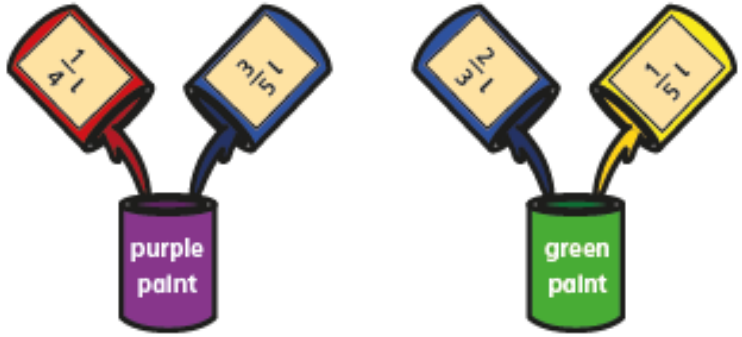
	True or false?
$2\frac{1}{3} + 3\frac{3}{4}$ *is equal to* $3\frac{1}{3} + 2\frac{3}{4}$	
$3\frac{3}{4} - \frac{1}{3}$ *is less than* $4\frac{3}{4} - 1\frac{1}{3}$	
$3\frac{3}{4} - 2\frac{1}{3}$ *is equal to* $3\frac{1}{3} - 2\frac{3}{4}$	

6 Complete the addition grid.

$1\frac{1}{4}$		$\frac{1}{4}$	$= 3\frac{3}{5}$
$\frac{1}{25}$	$1\frac{3}{20}$		$= 3\frac{39}{100}$
	$1\frac{1}{50}$	$1\frac{3}{100}$	$= 5\frac{9}{20}$
=	=	=	

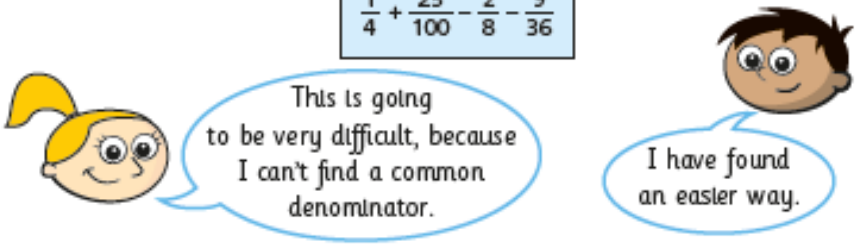
7 A painter uses the following mixtures.

How much more green paint does she have than purple paint?



8 Eva and Amir are working out this calculation.

$$\frac{1}{4} + \frac{25}{100} - \frac{2}{8} - \frac{9}{36}$$



Find Amir's solution. Explain how this calculation can be solved.

Daily News

Science World News

20th February 2020

Scientists Find Fossil of Giant Turtle Shell

What was Stupendemys geographicus?

- **Stupendemys geographicus was "the largest land turtle of all time".**
- **It was 4m long and was 100 times larger than its nearest living relative - the Amazon river turtle.**

Millions of years ago huge creatures, like the sabre-toothed cat, roamed Earth. It now seems that a gigantic turtle existed at the same time too! The species could have been one of the largest turtles to have ever existed.

Scientists found fossils of the huge turtle's shell in Venezuela, a country in South America.

The team gave the turtle the name Stupendemys geographicus. It means 'stupendous turtle' in Latin.

The turtle lived up to its name with its impressive size! It lived around 10 million years ago, in a wetland habitat in South America.

Professor Edwin Cadena said it was "the largest land turtle of all time". It was around 4m long - the same size as a small car.

Professor Cadena also told reporters the turtles ate "fishes, caiman, snakes - as well as molluscs."

The turtle was 100 times bigger than the largest turtle on Earth today.

The turtles had huge shells that were about 3m long! Males had horned shells. They used them to fight other males for territory and mates.

The team of scientists say deep scars on the fossils could be evidence of a fight.

The turtle had to be careful of another animal in its habitat. There was an even larger animal in its habitat that hunted the prehistoric turtle. Scientists believe that an 11m-long caiman called Purussaurus was its predator.

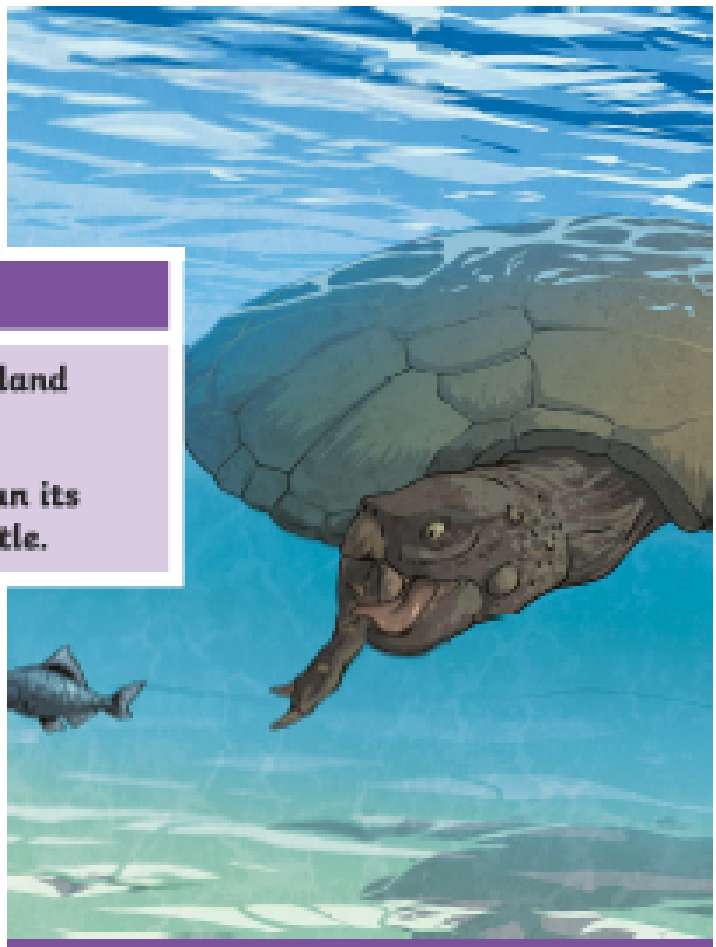


Illustration: Stupendemys geographicus

Professor Cadena said that "bite marks" were found on one of the shells. This could be evidence of an attack.

Scientists say the shells will help them to understand how turtles evolved. The theory of evolution explains how animals change over a long period of time to adapt to their habitat.

Glossary

fossils	Remains of a prehistoric animal.
caiman	A reptile that is similar to an alligator that's found in tropical areas of America.
molluscs	Invertebrates, such as snails, slugs, mussels and octopuses.
prehistoric	A time before people wrote things down.

Questions

1. Why do you think the turtle was given the name 'stupendous turtle'?

2. Find and copy three facts about the Stupendemys geographicus.

   1. _____

   2. _____

   3. _____

3. 'The turtle certainly lived up to its name'
   This suggests that...

   - ○ the turtle was very violent.
   - ○ scientists have chosen a good name for it.
   - ○ the turtle wasn't particularly impressive.
   - ○ the turtle wasn't strong enough.

4. 'Scientists say the shells will help them to understand how turtles evolved.'
   Tick the word that is closest in meaning to 'evolved'.

   - ○ changed
   - ○ hunted
   - ○ lived
   - ○ remained

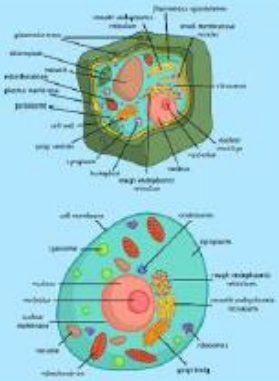
5. What do you think the scientists will do next? Explain your answer.

6. Write a summary of the story in 20 words or fewer.

Cells, Chromosomes, DNA and Genes

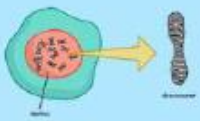
While you will not be examining these in detail, it is helpful to know about the building blocks of life for this unit.

Cells



Cells are the building blocks of all living things. All living things are made up of cells. Amoebas have one cell. Humans have trillions of cells!

Chromosomes



The nucleus of a cell contains chromosomes, which are made up of DNA.

DNA

DNA carries the characteristics that we inherit. It is located in two places in the cell: the nucleus and the mitochondria. DNA can replicate and make copies of itself. When cells divide, each cell needs to have an exact copy of the DNA in the old cell.

Genes

Genes are short sections of DNA that contain specific information. This is often called the genetic code. All the genes in the whole cell are called the genome.

Variation

What does variation mean?

What causes variation?

Inheritance

These are characteristics that are passed on to offspring from their parents.

Adaptation

Over many generations, a species will adapt to its environment because the animals with the most successful characteristics are more likely to survive and pass on these characteristics to their offspring.

Inheritance

When we talk about inheritance, we often mean things that are passed on to us when one of our relatives or friends has died. Inherited items are sometimes houses or important objects.

Inheritance

In science, inheritance refers to the genes that are passed on from parents to offspring. When we refer to inherited characteristics we tend to focus on physical characteristics as these are easy to spot but inherited characteristics include abilities such as taste and smell.



Parents and Offspring

Whole Class

Match the parent with its offspring.






How did you match the parents and offspring?
What are the inherited characteristics that you could see?

Parents and Offspring

MISCONCEPTION ALERT!

While offspring does mean child, it does not mean that you are only offspring when you are children! The inherited characteristics you gain from your parents are part of your DNA for life.

Even when you are an adult you are your parents' child!

Inheritance and Variation

How can inherited characteristics (similarities between parent and offspring) result in variation (differences)?

Well the majority of living things are the result of sexual reproduction so they have two parents. You inherit the characteristics from both parents but the way they combine makes the offspring unique.

The inherited characteristics can combine in different ways, which is the reason why siblings inherit the same characteristics but are not identical to each other.

Even identical twins that share the exact same combination of DNA are not 100% the same! This is due to the fact that genes develop separately when the twins are embryos or during later development.