

Home Learning Pack

Year 5; Week Beginning 12.07.21



Home Learning Links

Oak National Academy

Oak National Academy is an online classroom and resource hub. It provides high-quality video lessons and resources to support teachers, parents and pupils.

www.thenational.academy

BBC Bitesize

With BBC Bitesize it is easy to keep learning at home. You can access regular daily lessons in English, maths and other core subjects.

https://www.bbc.co.uk/bitesize

World Book Online

World Book online have just made their fabulous collection of over 3,000 e-books and audiobooks available for free for children to access at home. They have books suitable for all ages. Click on the following link to access them.

https://worldbook.kitaboo.com/reader/worldbook/index.html?usertoken=Mjk5MzQ6MTpJUjA5MjAxNjoy OmNsaWVudDE2OTc6MTY5NzoyMjE2Mjg4OjE6MTU4NDM4MDExMzA2Mjp1cw%3D%3D

Read Works.org

Read Works offers access to 3000+ comprehension for all age groups. Just sign up for a free account to access fantastic texts.

https://www.readworks.org/

Tutortastic

An online platform with tutorials and videos for home learning.

https://www.tutortastic.co.uk/blog/homelearning

Education Quizzes

A series of short quizzes for children to complete related to the National Curriculum subjects. Just select KS1 for Reception, Year 1 & Year 2 and select KS2 for Years 3-6.

https://www.educationguizzes.com/ks1/

Top Marks

A range of activities here but especially good interactive activities for maths.

https://www.topmarks.co.uk/

Classroom Secrets

Classroom Secrets Kids is offering free access to everyone until the end of April 2020. The platform is aimed at primary aged children and covers subjects such as maths, reading, grammar and spelling. The platform is really child-friendly so that they're able to access it on their own. There are a load of games and interactive activities from phonics to SATs

https://kids.classroomsecrets.co.uk/

National Geographic

National Geographic is a great platform for learning and it's totally free. There are online games, resources and competitions, too.

https://www.natgeokids.com/uk/teacher-category/primary-resources/

Reading Eggspress

Reading Eggspress has lots of reading activities including comprehension and retrieval questions to have a go at. Your child's Username and Password should be written in his Homework Book.

https://readingeggspress.co.uk/?_ga=2.107706762.961348329.1601363904-660844018.1598947512
We have been learning about division this week, mostly looking in-depth at partitioning and we will transition into using the short method for division. Here are some great maths games to play on Laptops or iPads. https://www.topmarks.co.uk/Search.aspx?q=division
Times Tables Rockstars This is a great times tables game, practice all of the tables up to 12 x 12. Log- in should be in Homework book/ Reading diary. https://ttrockstars.com/

Key Question Week 12: What can we do to help stop deforestation?

Key Text for Linked Learning: Deforestation in the Amazon Rainforest (Actionaid) Why rainforests matter (The Princes rainforest trust)

Linked Learning: English, Computing, Geography

In English, children will create a fact file about deforestation. Children will choose which side of the argument to discuss before planning their fact file (Are they for or against deforestation?) Children will begin by using the boxed-up approach to planning to support them in their vocabulary choices, layout and style. Children will look at different subheadings to use in their fact file and will begin to organise their ideas around these subheadings. Once the key features have been discussed and decided, children will have an opportunity to create a fact file on a piece of sugar paper - making sure they are including all the features discussed. Once finished, the class will view and evaluate each other's fact files; giving constructive feedback to each.

In PAG, Children will review semi-colons and apostrophes in a piece of writing and discussing how these punctuation marks can make a text more engaging.

In Geography, children will research modern global trade links and the distribution of natural resources, including energy, food, minerals and water and consider the impact that these are having on the planet.

In Computing, children will create a stop motion animation film that addresses issues surrounding deforestation. Children will work in groups to create a story boar about what their film will discuss and decide on a format. They will then look at different examples of stop motion animation and choose the techniques they will apply to their own film. Children will have the opportunity to practise using iMovie to create a shop motion scene before moving on and filming their animation.

Maths: In maths, children will consolidate multiplying fractions by whole numbers and making sure they simplify their answers. Children will then multiply mixed numbers by whole numbers and showing their answer as a simplified fraction. Children will then move on to use short division to divide 4-digit numbers by a single digit number and showing remainders as a fraction.

Science: N/A

History: N/A

Geography: See Above

Computing: See Above

Music: This week, children will explore some of the popular genres of music from the 20th century and comparing them to their roots in classical music.

Art: Using their shading techniques, children will create a background for their stop-motion animation video.

Design Technology: Children will create props and visuals for a stop-motion animation video.

PDW / R.E: N/A

P.E: Children will use the correct underarm bowling action when playing rounders. Children will also show the correct stance for striking a ball in rounders, learning the basic rules of the game and implementing them.

MFL: N/A

Vocabulary:

Hectares, canopy, deforestation, vapour, logging, clear cutting, indigenous, erosion, habitat, atmosphere

Monday 12th July

English

LO: To plan a non-chronological report

Handwriting: ord ord ord ord ord ord ord

Dear Humans

To: all-humans@googlemail.com

From: licky-lizard42@savetheanimals.org

Subject: FAO Humankind

Hi humans!

It's me, Chameleon. I wanted to write you a letter, but I couldn't find a pen, so I've decided to email you from my FlyPod™. You suck. Seriously. I wanted to send you a message to let you know that all of us animals are fed up with the way you are going about destroying our planet. Do you have any idea how long my species has been calling this place home? 65 million years! Pretty much, we waved goodbye to the dinosaurs and then stepped up to take our place. You've only been around for a hundred thousand years or so, and you've already managed to mess it all up. You've only been able to travel for a few hundred years, so that makes it even more depressing!

Here in Madagascar, I'm lucky if I can find a tree to call home now. You guys need so much wood it seems; I've no idea what you use it all for. It's not really the wood you want, though. Everywhere I go now there are herds of cows grazing on the grass where trees once used to be, or where the farmers have burnt the land to the ground.

Yesterday, I had a letter from my cousin in Africa, he lives just south of the Sahara desert. He used to be able to look out of his tree each morning and watch as herds of elephant and rhino drifted across the plains. He used to love moving to make way for a giraffe to grab some breakfast. Now, he looks out, and there's nothing to see. Nothing he wants to see, anyway.

He still sees elephants and rhinos, although mainly they are dead. Poached for their tusks or horns. The other day, and I know you won't believe this, hundreds of acres of habitat were destroyed so that an enormous pipe could be placed under the ground. Thousands of animals killed or displaced. And do you know what is going through that pipe? Cables for your broadband. All of those homes destroyed just so that you can watch dancing cats. Does that seem fair? It doesn't to me.

I wandered over to the beach last week, just to see how it was going. I was sat on a deck chair (it

was striped; you should've seen the colour of my skin!) when who should wander over to me but my old friend Taz. Taz is a green turtle, and she does a lot of miles. She'd just returned all the way from Australia to lay some eggs. All that way!

She's been floating to and from Australia for a long time now; she's always talked about how amazingly colourful the Great Barrier Reef is. It's so full of life, she'd tell me. This time, she had a tear in her eye. It's all white, she said. All the colour has been bleached



away. Oh sure, the warmer oceans might be great for you lot to swim in, but they are killing the corals and the animals that depend on them. I'm sure all this destruction is worth though, isn't it?

I'll say it again. Humans suck. But not all of you. Some of you are working hard to help, and we honestly appreciate that. The thing is, we need more and we need it quickly. If you don't start to make a real change soon, there won't be many of us left to save. Remember, there is no second chance; no Planet B.

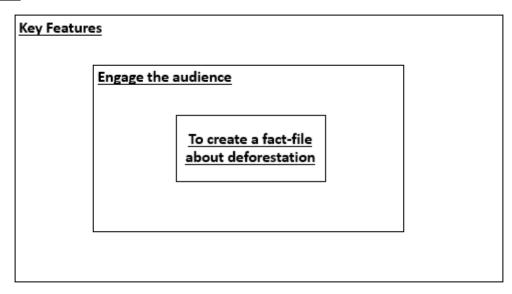
Thanks for listening.

Chameleon

RETRIEVAL FOCUS

- 1. What device did Chameleon use to write the email?
- 2. How long have the animals been calling Earth home?
- 3. What animals was Chameleon's cousin used to seeing?
- 4. Why had Taz returned from Australia?

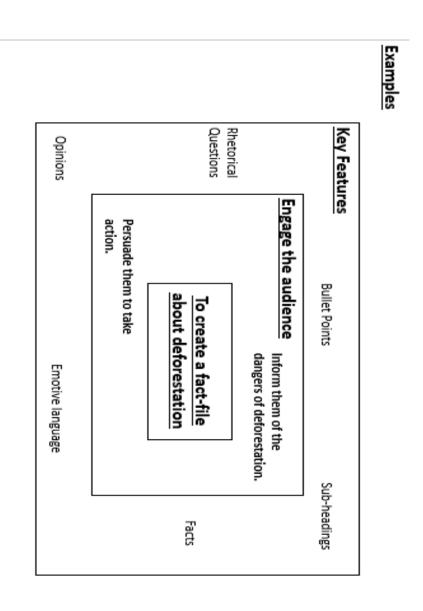
Examples



Main Task: It's your turn!

Complete the boxed-up approach model with your partner, include as many ideas as you can to engage your target audience.

The more examples you can come up with, the easier your planning will be tomorrow.



PaG LO: To use semi-colons in a list



https://www.youtube.com/watch?v=CdykLlB0F7E&feature=emb_logo

Main Task

1. List 3 reasons why deforestation is a good idea.

Eg: Deforestation is terrible because: Animals homes are destroyed; indigenous people are displaced and carbon emissions are not controlled by the trees.

2. List 3 reasons why deforestation is a bad idea.

Eg: Deforestation is a great idea because: Local farmers can expand their farms; palm oil is more useful to humans than other trees and the forest make way for useful highways and other roads to connect communities.

Answers

Answers:

- FlyPod
- 2. 65 million years
- 3. Elephants, rhinos and giraffes
- 4. To lay her eggs

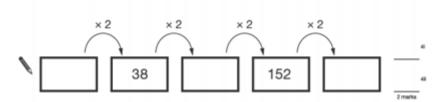
Maths

Monday 12 July, 2021

LO: To multiply fractions by whole numbers and simplifying the answer.

Here is a doubling sequence.

Write the three missing numbers.



- Convert these mixed numbers into improper fractions.
- a) 2 ½
- b) 1 ¾
- c) 2 4/5

- 2. Convert these improper fractions into mixed numbers:
- a) 17/5
- b) 13/3
- c) 16/3
- 3. What is the equivalent of 8/8:
- a) 1
- b) 22/4
- c) 3 1/3
- d) 2

4. What is the fraction:

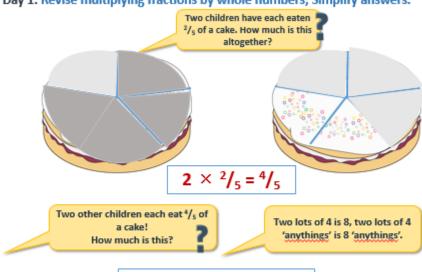






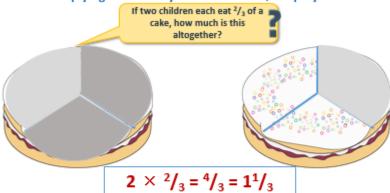
<u>Misconception:</u> Sheldon says that when he multiplies a fraction, it will give him a smaller answer. Is he correct?

Day 1: Revise multiplying fractions by whole numbers; Simplify answers.



$$2 \times \frac{4}{5} = \frac{8}{5} = \frac{1^3}{5}$$

Day 1: Revise multiplying fractions by whole numbers; Simplify answers.



Work in pairs to double other fractions less than 1.

Can you find one answer less than 1 and one answer more than 1?

Day 1: Revise multiplying fractions by whole numbers; Simplify answers.

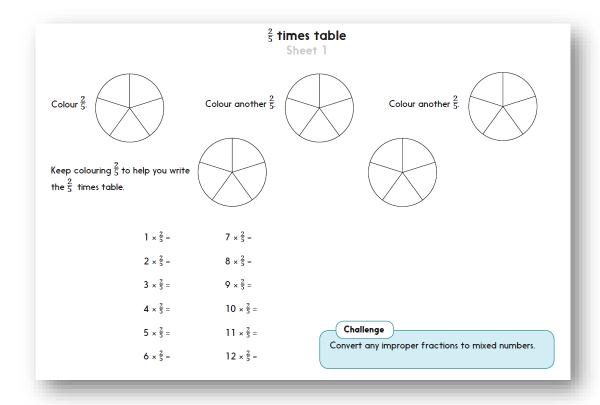
QD)

Now work in pairs to multiply fractions by 3, to give an answer less than 1, and an answer greater than 1.

What do we need to look for in the starting fraction if we want to find an answer less than one?



Does multiplication always produce a bigger answer than both of the numbers in the calculation?



If your answer is greater than 1, write it as an improper fraction and as mixed number.

1.
$$2 \times \frac{3}{10} =$$

8.
$$2 \times \frac{5}{6} =$$

2.
$$3 \times \frac{2}{7} =$$

9.
$$5 \times \frac{2}{5} =$$

3.
$$2 \times \frac{2}{3} =$$

10.
$$4 \times \frac{3}{7} =$$

4.
$$3 \times \frac{2}{3} =$$

11.
$$3 \times \frac{7}{10} =$$

5.
$$2 \times \frac{3}{4} =$$

12.
$$7 \times \frac{4}{7} =$$

6.
$$4 \times \frac{3}{4} =$$

13.
$$6 \times \frac{2}{3} =$$

7.
$$4 \times \frac{2}{5} =$$

14.
$$5 \times \frac{3}{10} =$$

Challenge

Count in steps of 4/5 from 4/5.

What is the first number you say which is not a mixed number?
What is the second number you say which is not a mixed number?
Stop counting here!

Six children each say they want $^2/_3$ of a pizza for a party tea. How many pizzas will Dad need to buy?

Tuesday 13th July

English

LO: LO: To plan a non-chronological report

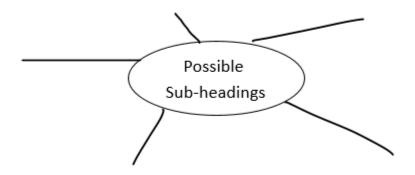
Handwriting: ough ough ough ough

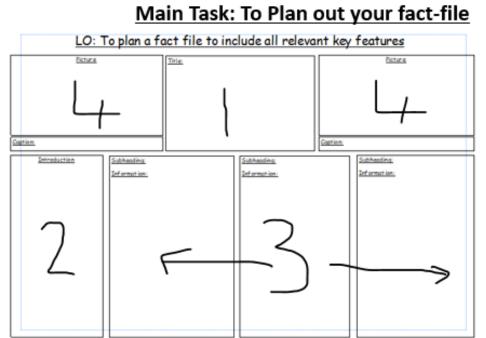
Reading Skills

Read – Dear Humans text in shared area

Which word shows how Chameleon feels about the damage humans have caused? How does Chameleon feel about the warming oceans? What gives this impression? Write a summary of the damage to the Earth that Chameleon sees or knows about. Find a word that tells you that animals were forced from their home. Explain how you know that this is an informal letter.

What do we need to cover?





This is <u>not</u> your final piece!

You can lay out your fact-file however you would like tomorrow, this is just a guide.

The information in each sections should be **bullet points or short phrases** not full sentences.

FOLLOW THE ORDER OF CREATION (Complete the drawings last).

LO: To plan a fact file to include all relevant key features					
Picture Caption:		Title:		Caption	<u>Picture</u>
Introduction	Subheading: Information:		Subheading: Information:		Subheading: Information:

PaG LO: To use apostrophes accurately



https://www.youtube.com/watch?v=zNFPnVz7JB4

Main task: Missing apostrophes

1.	Kims mum bought some sausages from the shop.
2.	The butterflys wings flapped as it flew from flower to flower.
3.	The dogs tail wagged excitedly as he walked.
4.	The dancers costume was very colourful and bright.

<u>Challenge:</u> Write your own sentence using an apostrophe

Answers

V: Depressing

I: Sad, angry, annoyed - the sarcastic use of "I'm sure it's all worth it, isn't it?"

S: Can't find a tree to call home. Herds of cows and burnt forest. Dead animals in Africa. Habitat destroyed for internet cable. Coral bleaching.

V: Displaced

E: Any appropriate examples from the letter

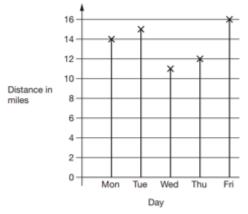
Maths

Tuesday 13th July, 2021

LO: To multiply mixed numbers by whole numbers

Amy went on a cycling holiday.

This chart shows how far she cycled each day.



How much further did Amy cycle on Friday than on Wednesday?



What is the equivalent fraction, decimal and percentage:

4/16

2. Write 25% as a fraction with 12 as a denominator.

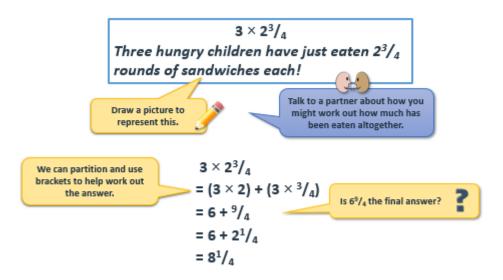
?/12

3. Write 0.36 as a fraction

4. 30% of teachers prefer Christmas holiday, 10% prefer Easter holiday. What percentage prefers the summer holidays?

Misconception: Leonard is writing out a pattern of numbers: $\frac{1}{4}$, $\frac{6}{4}$, $\frac{9}{4}$, $\frac{10}{4}$, $\frac{15}{4}$. Where did he go wrong?

Day 2: Multiply mixed numbers by whole numbers.



Day 2: Multiply mixed numbers by whole numbers.

Now use this method of partitioning into brackets to find $2 \times 3^2/_3$, then $4 \times 2^3/_5$. $= (2 \times 3) + (2 \times 2^2/_3)$ $= 6 + 4^4/_3$ $= 6 + 1^1/_3$ $= 7^1/_3$ Now use this method of partition brackets to find $2 \times 3^2/_5$. $= (4 \times 2)^3/_5$ $= (4 \times 2) + (4 \times 3^4/_5)$ $= 8 + 1^2/_5$ $= 8 + 2^2/_5$ $= 10^2/_5$

Multiplying fractions

Sheet 1

Write any numbers > 1 as mixed numbers.

1.
$$2 \times \frac{2}{5} =$$

2.
$$3 \times \frac{2}{7} =$$

3.
$$3 \times \frac{3}{10} =$$

4.
$$2 \times \frac{1}{2} =$$

5.
$$3 \times \frac{1}{2} =$$

6.
$$2 \times \frac{3}{4} =$$

7.
$$2 \times \frac{2}{3} =$$

8.
$$3 \times \frac{2}{3} =$$

9.
$$2 \times \frac{4}{5} =$$

10.
$$3 \times \frac{3}{5} =$$

11.
$$4 \times \frac{1}{2} =$$

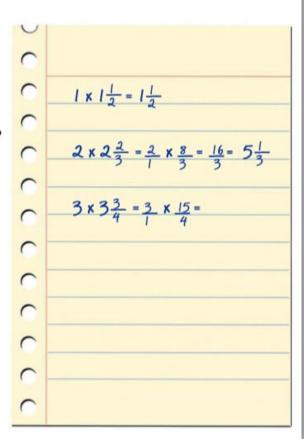
12.
$$4 \times \frac{2}{3} =$$

Challenge

Make up your own sequences of fraction multiplications, or try $1 \times 2\frac{3}{4}$, $2 \times 3\frac{4}{5}$, $3 \times 4\frac{5}{6}$... See what patterns you can find.

Fraction fireworks

- 1. Work out the answers to the following: $1 \times 1\frac{1}{2}$, $2 \times 2\frac{2}{3}$, $3 \times 3\frac{3}{4}$ and $4 \times 4\frac{4}{5}$. Make a note of your answers.
- 2. What do you think the next answer will be in this sequence of calculations, i.e. $5 \times 5\frac{5}{6}$? Test out your prediction!
- 3. Now work out $1\frac{1}{2} \times 3$, $2\frac{2}{3} \times 4$, $3\frac{3}{4} \times 5$ and keep a record of your answers.
- 4. What do you think the next answer in the sequence will be, i.e. the answer to $4\frac{4}{5} \times 6$? Test out your prediction.
- 5. Compare your answers to the answer in the first sequence of calculations. What's the same and what's different?



Wednesday 15th July

English

LO: To write a non-chronological report.

Handwriting: king king king king king king

Watch: The Windmill Farmer

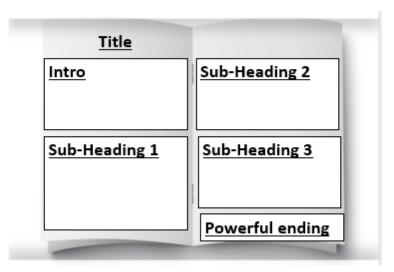
Reading Skills

https://www.literacyshed.com/windmillfarmer.html

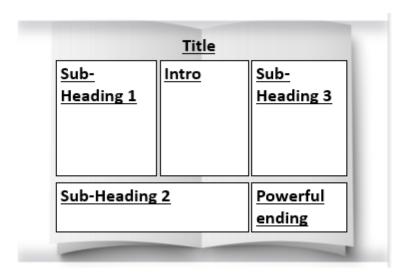
- 1) (0:25) What do the windmill seeds look like?
- 2) (1:30) Name three things that show you there is a storm.
- 3) What happens to the windmill crop in the storm?
- 4) (2:50) What atmosphere is being created in this part of the animation? How has it been created?
- 5) In the end, when the farmer came out of his house, he had a really impressive crop of windmills! How did this happen?

https://www.literacyshed.com/windmillfarmer.html

Main Task: Create your fact-file (Option 1)



Main Task: Create your fact-file (Option 2)



Key features to include:

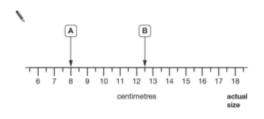
- · An eye-catching heading in a large font.
- · An introductory paragraph.
- Text split up into paragraphs and each paragraph on a different aspect of the subject.
- · Sub-headings for each paragraph.
- · Usually written in present tense.
- · Pictures of the subject.
- · High-level vocabulary
- Emotive language

Maths

Wednesday 14th July, 2021

LO: To divide 4-digit numbers by a single digit number with remainders.

Here is part of a centimetre scale, with two points marked.



What is the distance between point A and point B?



- 1. 36 is a multiple of:
 2. Solve:

 a) 2
 b) 3

 c) 4
 c) 6x12

 d) 5
 d) 6x13

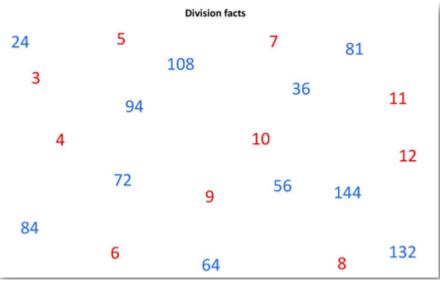
 Careful!!
- 3. Write the following as inverse operations:

6 x 15 =

4. Complete the pattern:

72, 78, ___, ___, 96, ___, ___.

Misconception: Which of these divisions will have an answer less than 1000? $1425 \div 5$, $5224 \div 3$, $7352 \div 6$. How do you know?



Day 1: Use short division to divide 4-digit numbers by single-digit numbers, including those that leave a remainder.

Using base 10 equipment to work out $2381 \div 3$.

32381

We are going to look for *groups of three* 1000 blocks, then *groups of three* 100 blocks and so on...

Day 1: Use short division to divide 4-digit numbers by single-digit numbers, including those that leave a remainder.

 $1381 \div 6$

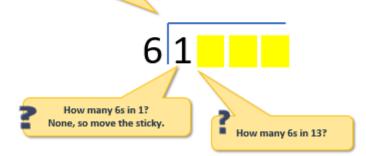
Roughly how many 6s are in 1381?

200 × 6 = 1200 and 300 × 6 = 1800, so the answer must lie between 200 and 300.

61381

Day 1: Use short division to divide 4-digit numbers by single-digit numbers, including those that leave a remainder.

We are going to move a sticky note along to hide and reveal each column in turn.



Short division with remainders

Sheet 2

1.
$$5237 \div 4$$

$$3. 8343 \div 8$$

4.
$$2734 \div 5$$

5.
$$9535 \div 4$$

7.
$$1429 \div 4$$

8.
$$1532 \div 7$$

Challenge

Write two different 4-digit numbers which when divided by 5 will give a remainder of 2.

Write two different 4-digit numbers which when divided by 4 will give a remainder of 3.

Thursday 14th July

English

LO: To write a non-chronological report

Handwriting: ue ue ue ue ue ue

Reading Skills

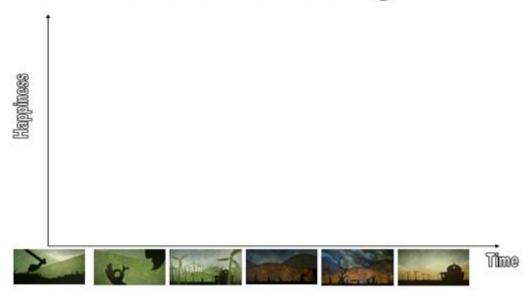
Watch: The Windmill Farmer

https://www.literacyshed.com/windmillfarmer.html



https://www.literacyshed.com/windmillfarmer.html

How is the farmer feeling?



Self-Assessment Sheet (Stage 1)

In one colour, identify whether you have included each of the key features in your writing. At the end of the lesson, we will again determine how many key features we have included.

Key Feature	(:)	
An eye-catching heading in a large font.		
An introductory paragraph.		
Text split up into paragraphs and each paragraph on a different aspect of the subject.		
Sub-headings for each paragraph.		
Present tense.		
Pictures or diagrams of the subject.		
High-level vocabulary.		

Main Task: Finish your fact-file

- An eye-catching heading in a large font.
- · An introductory paragraph.
- Text split up into paragraphs and each paragraph on a different aspect of the subject.
- · Sub-headings for each paragraph.
- Usually written in present tense.
- Pictures of the subject.
- · High-level vocabulary
- Emotive language

Self-Assessment Sheet (Stage 2)

In a <u>second colour</u>, identify whether you have included each of the key features in your writing.

Underneath your key features self-assessment, give yourself a target to achieve tomorrow.

Key Feature	:)	:);
An eye-catching heading in a large font.	>		
An introductory paragraph.	>	>	
Text split up into paragraphs and each paragraph on a different aspect of the subject.		/	/
Sub-headings for each paragraph.	\rangle		>
Present tense.	\langle	<	
Pictures or diagrams of the subject.		\	/
High-level vocabulary.		V	

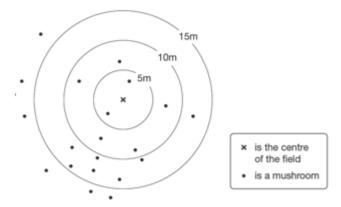
Maths

Thursday 15th July, 2021

LO: To divide 4-digit numbers by single digit number and show remainders as a fraction.

Class 6 did a survey of mushrooms growing in a field.

The diagram shows the distances of mushrooms from the centre of the field.



How many mushrooms were more than 10 metres from the centre?



 What is the largest EVEN number you can make with the following digits:

6 5 9 3 8 7 1

What is the smallest odd number that you can make?

How many times can you take 3 away from 72 until you get to zero?

3. 2356 ÷ 4 =

4. Simplify 36/45

a) 2/3

b) ¾

c) 4/5

d) 5/6

Misconception: Raj calculated: 3425 ÷ 6 and got 2570 r 5. What did he do wrong?

Day 2: Use short division to divide 4-digit numbers by single-digit numbers, expressing the remainders as fractions.

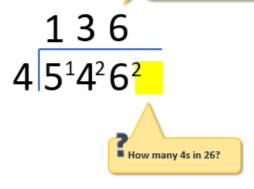
5466 ÷ 4

45466

Day 2: Use short division to divide 4-digit numbers by single-digit numbers,

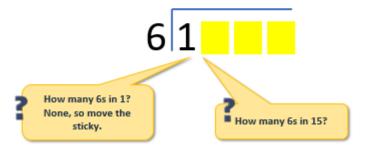
expressing the remainders as fractions.

6, and 2 left over.
We write 6 in the 10s column as we are dividing the 10s, then 2 tens in front of the 1s digit.



Day 2: Use short division to divide 4-digit numbers by single-digit numbers, expressing the remainders as fractions.

We are going to move a sticky note along to hide and reveal each column in turn.



Short division: remainders written as fractions.

Sheet 2

Work out the EXACT answers to these divisions. Write any remainders as fractions.

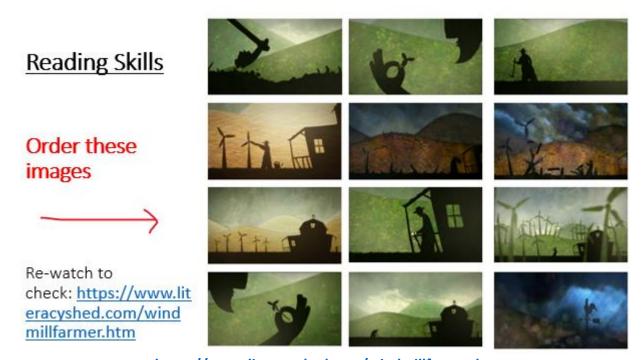
- 1. 7453 ÷ 3
- 2. 8342 ÷ 5
- 3. 2589 ÷ 3
- 4. $3801 \div 7$
- 5. 5124 ÷ 6
- 6. 3456 ÷ 5
- 7. 8346 ÷ 4
- 8. 7621 ÷ 6
- 9. 2897 ÷ 3
- 10. 3247 ÷ 4
- 11. 6532 ÷ 6
- 12. 5214 ÷ 8

Friday 16th July

English

LO: To edit and improve a nonchronological report

Handwriting: pog pog pog pog pog pog



https://www.literacyshed.com/windmillfarmer.htm

Edit and improve your final piece

Using your own self-assessment from yesterday and your partners peer-assessment today. Action changes in your pieces of work to improve it's:

- Presentation
- Clarity
- Impact
- · Effect on target audience

Maths

Friday 16th July, 2021

LO: To consolidate division of 4-digit numbers.

Seb had some cherries.

Every day he ate 10 cherries and gave 5 away.

After he gave the last 5 cherries away, he had eaten 40 cherries altogether.



How many cherries did Seb have at the start?

1. 2369 ÷ 5 =

Show the remainder as a fraction.

2. Find common factors for 12 and 15

3. Find common multiples of 2 and 7

4. Find the following:

 7^3

 4^3

 10^{3}

Misconception: Howard thinks that if 180÷ 3 is 60 then 180÷ 6 must be 120. Is he correct?

Day 3: Revise short division of 4-digit numbers, expressing remainders as fractions.

472 ÷ 4

3958 ÷ 3

2786 ÷ 4

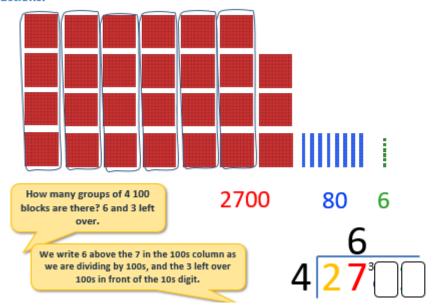
7975 ÷ 4

Agree a rough estimate for each division.

42786

We're going to use base 10 equipment to work out 2786 ÷ 4

Day 3: Revise short division of 4-digit numbers, expressing remainders as fractions.



Short division

Sheet 1

Use short division to work out the answers to these divisions. Write the remainders as fractions.

3.
$$277 \div 3$$

Challenge

Write two other divisions by 6 with answers less than 1000. Write two other divisions by 6 with answers between 1000 and 1200.

Challenge:

Find:

Fill the missing boxes to give an answer with fraction remainders as

follows: 581 ÷ 7 = [_]

187 ÷ □ = 1/2

331 ÷ 🗆 = ____3/4 $3456 \div 5 = []$

□ ÷ 10 = ____2/5 5400 ÷ 9 = []

A farmer is packing eggs.

Each box holds six eggs.

The farmer has 890 eggs to pack.

How many boxes will the farmer fill?

Answers

- 1. Convert these mixed numbers into improper fractions.
- a) $2 \frac{1}{2} = \frac{5}{2}$
- b) $1 \frac{3}{4} = \frac{7}{4}$
- c) 24/5 = 14/5

- 2. Convert these improper fractions into mixed numbers:
- a) 17/5 = 32/5
- b) 13/3 = 41/3
- c) 16/3 = 51/3

- What is the equivalent of 8/8:
- a) 1
- b) 22/4
- c) 3 1/3
- d) 2

4. What is the fraction:







9/4 = 21/4

Misconception: Sheldon says that when he multiplies a fraction, it will give him a smaller answer. Is he correct? No, when you multiply, the value of the product will always be larger.

 What is the equivalent fraction, decimal and percentage: 4/16 4, 0.25, 25% 	 Write 25% as a fraction with 12 as a denominator. 3/12
3. Write 0.36 as a fraction. 36/100 or 18/50 or 9/25	4. 30% of teachers prefer Christmas holiday, 10% prefer Easter holiday. What percentage prefers the summer holidays? 60% prefer summer holidays.

Misconception: Leonard is writing out a pattern of numbers:

¾, 6/4, 9/4, 10/4, 15/4. Where did he go wrong? Leonard stopped counting in 3's for the numerator.

 1. 36 is a multiple of: a) 2 b) 3 c) 4 d) 5 Careful!! 	2. Solve: a) 6x20 = 120 b) 14x6 = 84 c) 6x12 = 72 d) 6x13 = 78
3. Write the following as inverse operations: $6 \times 15 = 90$ $15 \times 6 = 90$ $90 \div 6 = 15$ $90 \div 15 = 6$	4. Complete the pattern: 72, 78, 84, 90, 96, 102, 108.

Misconception: Which of these divisions will have an answer less than 1000? $1425 \div 5$, $5224 \div 3$, $7352 \div 6$. How do you know? I know that $1425 \div 5$ will give me an answer less that 1000 because the divisor is less than the thousands digit.

What is the largest EVEN number you can make with the following digits:	How many times can you take 3 away from 72 until you get to zero?
6 5 9 3 8 7 1	24
What is the smallest odd number that you can make?	
Largest: 9876531 Smallest: 1356789	
3. 2356 ÷ 4 =	4. Simplify 36/45
589	a) 2/3 b) ¾ c) 4/5 d) 5/6

Misconception: Raj calculated: 3425 ÷ 6 and got 2570 r 5. What did he do wrong? Raj forgot that 6 cannot go into 3 evenly, therefore there must be a 0 in the thousands column.

1. 2369 ÷ 5 =	2. Find common factors for 12 and 15
Show the remainder as a fraction.	1, 3
473 4/5	
3. Find common multiples of 2 and 7	4. Find the following:
14, 28, 42	$7^3 = 343$ $4^3 = 64$ $10^3 = 1000$

Misconception: Howard thinks that if 180÷ 3 is 60 then 180÷ 6 must be 120. Is he correct? No, 180÷ 6 is 30.

Deforestation in the Amazon rainforest

Deforestation: The destruction of trees or forests on a massive scale.

Methods of clearing the rainforest:

- Slash and burn trees are cleared and vegetation is burnt
- Clear cutting complete removal of all trees in an area
- Selective logging targeting specific valuable trees but leaving the rainforest intact

Carbon emissions - trees store carbon in their trunks, branches and roots which is released when they are cut down.

Water cycle - trees help return water vapour to the atmosphere which

to the atmosphere which then falls as rain.

Soil erosion - without

trees to protect it, soil in the rainforest is easily eroded. The soil loses its nutrients especially when it rains heavily.

Indigenous people the rainforest was

 the rainforest was once home to one million indigenous people. Now only 200,000 remain.



Loss of habitat

for millions of species like insects, birds, snakes, frogs

and lizards.

Climate change -

deforestation contributes to global warming because trees are releasing carbon instead of storing it.

Medicine - scientists

have discovered that rainforest plants are sources for medicines to treat diseases like

Sources: National Geographic, BBC, Economist, W.

change lives. Yes good. act:onaid





1. Why do rainforests matter?

They are important because they offer homes to trees, other plants, animals, and local people – but they also play a big role in keeping the Earth's climate and our weather as we know it.

2. Where are they?

Over 80 countries in the tropics (where the sun is hottest) have rainforests.

3. What is a rainforest?

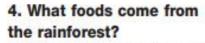
Plants and animals make up the rainforest. They are home to half the world's known plants



and animals. There are 5 layers.

- The emergent layer at treetop height.
- The canopy layer where the leaves form a 'ceiling'.
- 3. The understorey layer that is dark and humid.
- 4. The shrub layer.
- 5. The forest floor.





Rainforests give us crops and medicines, like rice and potatoes, nuts, spices, coffee and chocolate.

5. How do they create the Earth's climate?

Rainforests stop flooding and provide rain. The trees soak up tropical rainfall and then slowly release the water into the air to form rainclouds. These clouds are then carried by the winds to other countries where they 'feed' the crops. The trees also remove carbon dioxide, a global warming gas. They store the carbon in their trunks and release the oxygen that we breathe.

What's happening to tropical rainforests?

1. Why are trees being chopped down?

In the past trees were cut down to clear land to grow food locally and graze animals. This is subsistence farming. But today the trees and the land are used to grow crops for products like

- soy or soya
- palm oil / vegetable oil

Goliath beetle

- beef
- timber, paper
- precious metals

rainforest is being lost? Every year about 13 million bectares of

2. How much of the

13 million hectares of rainforest are lost – the same as 8.5 million football pitches a year, or an amazing 23,483 pitches a day.

3. What is replacing the trees?

Cattle farming, plantations, paper mills, mining, roads and towns are replacing the trees.



deforestation in Borneo. Images courtesy of UNEP/GRID-Arendal

4. What does it mean?

Cutting down rainforests means we lose the trees, plants and animals and it affects our climate and the way we live. The rainforests support our way of life and their loss will affect us all.