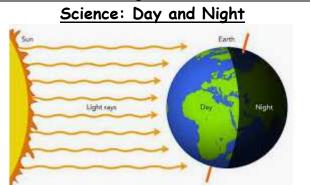
## Year 5 - Home Learning Project - Week 6 - 11/05/2020: Infinity and Beyond (4)

English worksheet and tasks	Maths:	Reading Plus:	TTRS and Numbots	PE session	A Topic activity from the choices below.
Read <u>'Life on Earth would not</u> <u>be possible without trees'</u> and complete the tasks below.	Complete the White Rose Maths tasks at the end of this document - 1 per day. Ensure you watch the video before you complete the task.	Log into <u>Reading Plus</u> and complete your weekly reading comprehension tasks and vocabulary tasks. <i>Site code: rpendea2</i>	Working on Times Table Rockstars - Can you complete all the set games and challenge somebody in our school? Are you winning in the current Battle of the Bands?	Join Joe Wickes live every morning @ 9:00am or access it any time throughout the day.	Try to complete all of the tasks and send your work to your teacher.

## This week's themed learning is based around our <u>new topic</u> of Space - Infinity and Beyond



Notification and the state of the second

Watch the <u>time lapse video</u> of the sky changing from Day to Night. What do you notice? What is happening? How can you explain it?

During the course of 24 hours the Earth spins on its own axis

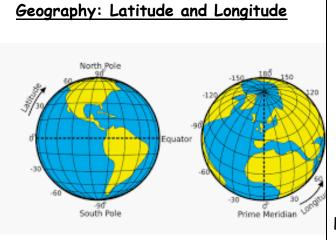
(turns around) as it completes its orbit around The Sun. This can sound really complicated but when you can watch a model of it the idea becomes much clearer. Take a look here on <u>BBC Bitesize</u> and <u>here</u>

Can you act it out with family members? The Sun needs to stand in the centre and you (Planet Earth) need to spin around whilst also going (orbiting) around The Sun. Dizzy yet?

Where would the moon be in all of this? Can you add a third person to your day and night drama?

Now that you've watched an explanation and acted it out could you try to explain this idea to someone else?

Label the diagram (full size underneath) and write an explanation for why we experience day and night. There is a word bank included so remember to use accurate scientific vocabulary.



Latitude and longitude are part of the geographic coordinate system. They help us to map every point on the Globe. Latitude represents the imaginary lines which go vertically around the globe and Longitude represent the lines which go horizontally around the globe.

Watch the BBC Bitesize video <u>here</u>

Then complete the lines of latitude and longitude activity underneath.

#### History: Copernicus



Last week we looked at the famous scientist Galil and how his work was inspired by Copernicus' heliocentric model of the solar system. This week we would like you to find out more about Copernicus the famous astronomer.

Recap on what you know about Copernicus here And research further information here and here

When you have made notes from your research complete a biography for Copernicus. You can fin template underneath.

## Discussion:

Watch this BBC video clip <u>'Who was the greates</u> <u>scientist?'</u>

It's a funny video exploring differences between Galileo and Copernicus. What do you think? Expla somebody at home who you think the greatest scientist was and why.

	<u>Computing: 2 Simulate</u>
	2Simulate
ileo out	Can you work through this simulation on Purple mash to save the Space mission? You need to read each step carefully and make the correct decisions when faced with different choices.
2	This has been set as a 2Do for you on Purple Mash.
nd a	
: <u>†</u>	
n ain to	

## Science: Why do we have seasons?



In the UK we experience 4 seasons each year but why is it hotter in summer and colder in winter? Some people think it's because The Earth is closer to The Sun in summer but this is not the reason. As our planet orbits around The Sun it is tilted on it's axis and this is what causes our planet to have seasons. You can read more about why we have seasons <u>here</u> and watch a video from Terrific Scientific <u>here</u> When you have finished your research complete the seasons sheet to explain what happens (full size underneath).

DT/ Outdoor Learning	English: Vocabulary	English: Writing	British Values/Global Learning
Create your own sun dial.	Choose 5 spelling words from the Y5/6	Recap your understanding of VE day and what makes	Discuss - Should one country own
	Statutory Spelling List.	it so important. Use <u>BBC bitesize</u> to explore the	planets in our solar system?
Sundials are the oldest known instruments for telling	<ul> <li>Write 3 synonyms for each word</li> </ul>	history behind it.	
ime. The surface of a sundial has markings for each	- Write the word in a sentence.		As a result of the Space race in
our of daylight. As the Sun moves across the sky,	- Write a definition for the word.	Imagine you are a British citizen during WW2 and	the 60's between America and
nother part of the sundial casts a shadow on these		you hear the news that the war is ended. How would	Russia the USA was the first
harkings. The position of the shadow shows what time t is.	E.g. Mischievous	you feel during VE day? What would you want to do to celebrate?	country to reach The Moon and plant it's flag there.
	Synonyms – naughty, disobedient,		However, The 1967 Outer Space
Ise the sundial activity sheet below to create your own	misbehaving	Write a diary entry for VE day considering the	Treaty states that no nation can
undial. Take pictures of your findings and upload them	misbendving	thoughts and feelings for your character. Include	'own' the moon.
o teams!	Adam was up to his mischievous tricks	the features of a diary entry:	
	•		What do you think? Should
	again.	- Past tense (Write if you have already celebrated	America have a greater share of
	Mischievous - Behaving in a way, or	and VE day has taken place)	The Moon because it got there
		- First person pronouns (I, we, my)	first? Or should The Moon be
	describing behaviour, that is slightly bad	- Describe the writer's point of view through	shared by all countries of the
	but is not intended to cause serious harm	description (alliteration, simile, metaphor,	world?
	or damage.	personification)	
3 3 4 4 4 4		- Include opinions as well as facts	What about future discoveries in
		- Organise events into paragraphs	Space?
	Complete the Grammar Vocabulary Quiz on Purple Mash		For example: If precious minerals
		963877 12 May 145	and metals were discovered on
		the many front , , will the most of	Mars in the future should these be
		This part marks as the many that	shared equally amongst all
	abc y 5 Grammar Vocab	they and much is baked of the start and the start of the	countries on Earth or only betwee
		the the states of a send the	the countries that invested money
		the in the face house in the	to make the mission there
		Liter the Hinne of the Car	possible?
		the first for the second	Possibles
		aller the trade to make the for the left of the left o	Write a paragraph arguing for or
	Quiz 5 Quiz 6	I say the project of the deer that we have the	
		the much lithing light and the	against ownership of planets in ou

solar system.

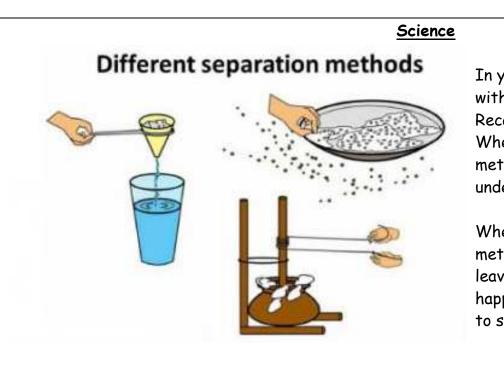
#### History/Art

Think back to our WW2 topic and how propaganda was used to influence people. Watch the following video <u>here</u>. This short film explains how people were persuaded to join the war effort, and the importance of motivational campaigns.

Create your own motivational posters to galvanize others to join the NHS volunteers to support vulnerable people during the current pandemic. Remember to consider the colours you use, the message you want to portray and the poster must be able to be seen from a safe 2metre distance.







#### Geography

Recap on our previous learning of the rainforests by checking out the following information here.

Once you have read all the information (makes notes if you wish in your workbook) then complete the online guiz by clicking here.

How many did you get out of 10? Send your teacher your scores so we can see how well you do.

#### Website links mentioned above:

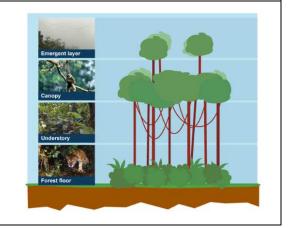
https://commons.wikimedia.org/wiki/File:Sonne\_Zeitraffer\_-\_Sun\_Time\_Lapse\_3840x2160p\_24FPS\_CC\_(Royalty\_Free)\_(Kostenlos)\_10bit.webm - Science Day and Night time lapse video https://www.bbc.co.uk/bitesize/clips/zrd9wmn - Science Day and Night BBC video

https://www.youtube.com/watch?v=hPa7bu1q7D4 - Science Day and Night video

- https://www.sciencekids.co.nz/sciencefacts/scientists/nicolauscopernicus.html Copernicus research
- https://www.famousscientists.org/nicolaus-copernicus/ Copernicus research
- https://www.bbc.co.uk/bitesize/clips/z6shfq8 Greatest scientist debate
- https://spaceplace.nasa.gov/seasons/en/- science why do we have seasons information
- https://www.bbc.co.uk/programmes/p04wf449 science video to explain why we have seasons
- https://www.bbc.co.uk/bitesize/topics/zvsfr82/articles/zd4rmfr Geography latitude and longitude video
- https://www.bbc.co.uk/bitesize/clips/zb9c87h separating materials science sticky knowledge
- https://www.bbc.co.uk/bitesize/topics/zcvv4wx/articles/zw7tv9q separating materials science sticky knowledge BBC Bitesize
- https://cdn.oxfordowl.co.uk/2019/08/29/13/56/09/5a42eb6a-f57f-4dc4-a66e-bd4c5e27e4b7/SpellingWordList\_Y5-6.pdf Y5/6 Spelling List
- https://www.bbc.co.uk/teach/class-clips-video/history-ks2-ve-day/z7xtmfr BBC Bitesize VE Day History
- https://www.bbc.co.uk/teach/class-clips-video/history-ks2-how-propaganda-was-used-during-world-war-two/zr77wty Propaganda posters
- https://www.bbc.co.uk/bitesize/guides/zpmnb9g/revision/1 Rainforest revision and guiz

In your previous science topic you experimented with mixing and separating different materials. Recap on the different methods here and here. When you have remembered the different methods complete the separating mixtures sheet underneath.

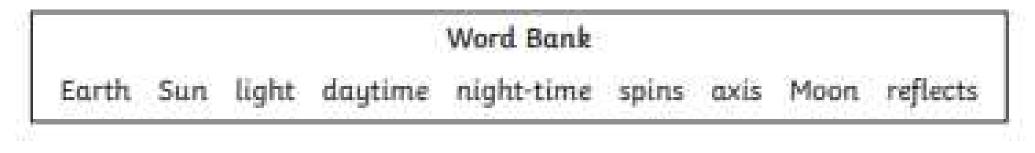
When you are finished you could try some of the methods at home e.g. dissolve salt in water and leave it for a few days in a warm place. What happened? Can you explain the scientific process to someone else?



https://www.bbc.co.uk/teach/class-clips-video/science-ks2-the-work-of-nicolaus-copernicus/z64skmn - Copernicus video

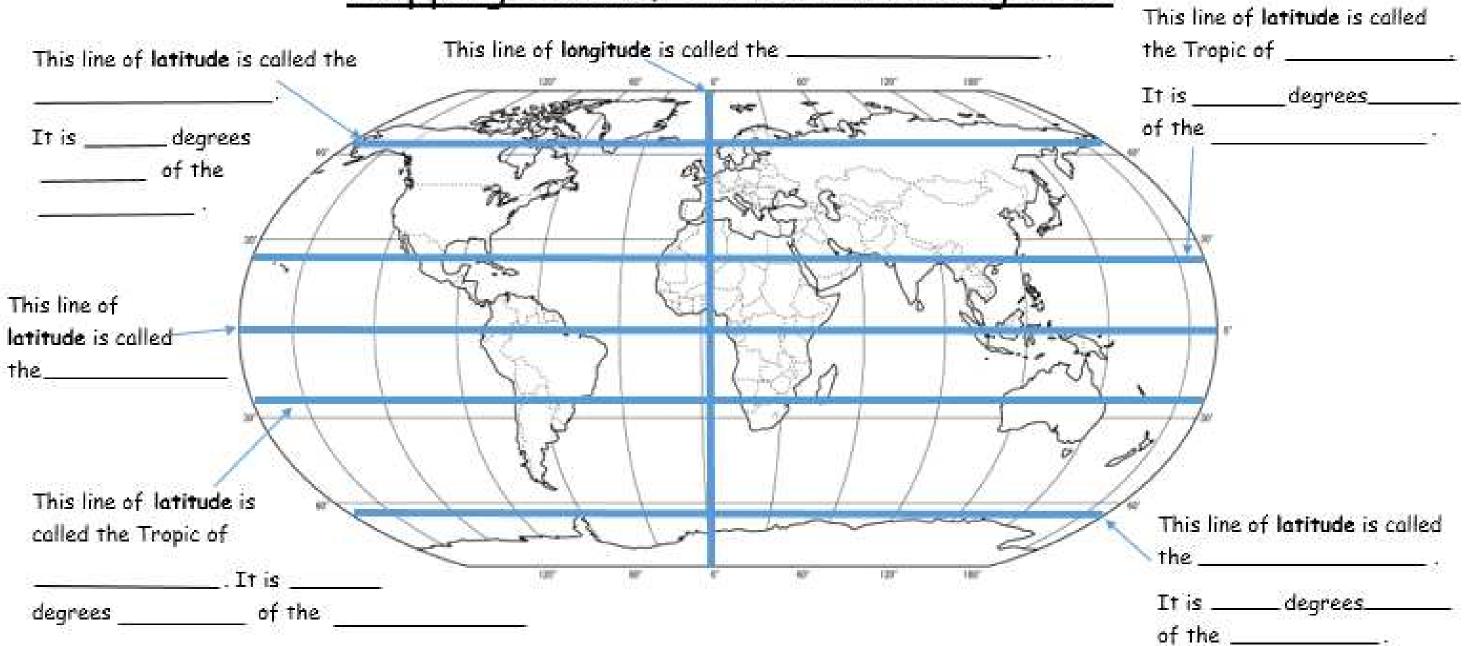


- 1. Label the Earth, Sun and Moon on the picture.
- 2. Can you explain why we have daytime and night-time?



# Colour in the picture to show which part of the Earth is in daytime and which part is in night-time.

# Mapping lines of latitude and longitude



# Extension questions to research

- 1) Can you explain what the International Date Line is? Where would you find it on the map?
- 2) In as much detail as you can explain why the Prime Meridian is in Greenwich, England.

# **Nicolaus Copernicus Fact File**

Full name: Date of Birth: Place of Birth: Famous for:	

Who was Nicolaus Copernicus?

Key events during Nicolaus Copernicus' life:

Interesting facts about Nicolaus Copernicus:





# **Separating Mixtures**

Draw a line from the process to its correct description.

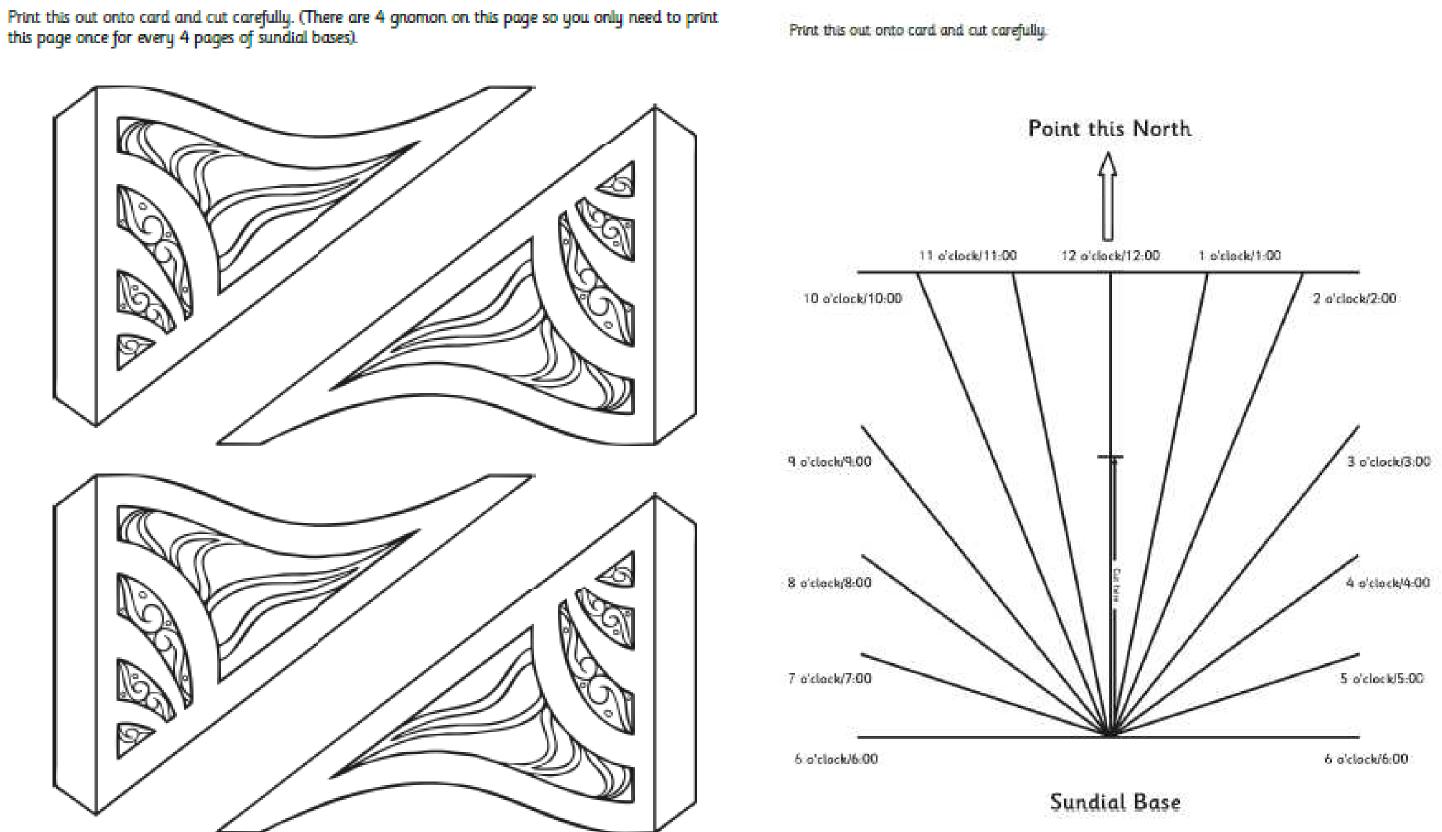
Evaporating and Condensing	Separates insoluble solids from liquids
Decanting	Separates two liquids which have different 'weights'
Magnetism	Separates different sized solids
Filtering	Separates soluble solids from liquids
Sieving	Separates iron and steel from non=magnetic materials

Mixture	Process
salt + water	
sugar + water	
rice + pasta shapes	
sand + water	
flour + rice	
paperclips + sawdust	

# The Seasons

<ol> <li>The change in seasons is caused by t</li> </ol>	the in the Earth's
2. The two halves of the Earth are call	ed the North and South
Britain is in the	_ hemisphere.
3. Because of the tilt, one	points towards the sun and one points away. It is
summer in the hemisphere that points _	the sun. It is winter in the hemisphere
that pointsfrom	n the sun.
a. On the diagram above, label the N	SUN
South Hemisphere and the Equato	
b. In which hemisphere is it Summer'	?
c. In which hemisphere is it winter?	





## English Home Learning Y5

<u>Week 6</u> - 11<sup>th</sup> May 2020

# Introduction.

Each week you will receive a set of English tasks. You should aim to complete one each day. Spending about 30 minutes on reading, 45 minutes on writing and at least 20 minutes on grammar and spelling. It is fine for you to ask for help from parents, siblings or your teacher through teams.

During the first week you will:

Week 4	
I have used the text to answer the questions.	$\vec{\chi}$
I have written a letter using persuasive language.	$\vec{\lambda}$
I have read and answered the grammar questions carefully.	$\vec{\lambda}$
I have practised the spellings and used some in my own sentences.	$\overrightarrow{\mathbf{x}}$

# Colour the stars when you think you have achieved this.

If you love reading and writing and want more of a challenge you can keep writing stories based on your own ideas or other books you have read.

Or explore

<u>www.lovereading4kids.co.uk</u> or <u>www.newsela.com</u> to find more extracts to read and write about.

<u>Monday 11<sup>th</sup> May 2020</u> <u>Year 5 - 'Life on Earth would not be possible without trees' - Day 1</u>

# 'Life on earth would not be possible without trees'

## Reading

Carefully read the article.

Answer the multiple choice questions at the end of the reading.

Use this space to write a multiple choice question of your own.

Tuesday 12<sup>h</sup> May 2020

Year 5 - 'Life on Earth would not be possible without trees' - Day 2



Write a letter to the government persuading them to protect our forests. Aim to write two paragraphs.

Use this space to write down persuasive language you will use.

What do you want the government to do? Why do you want the government to do this? What do you hope will be the result of protecting our forests? Wednesday 13th May 2020

Year 5 - 'Life on Earth would not be possible without trees' - Day 3

#### Grammar

Complete this sentence. If I work hard, \_\_\_\_\_

Insert the comma in the correct place to show the fronted adverbial.

Throughout the film my sister talked on her phone.

Underline the expanded noun phrase in this sentence. I kicked my favourite green football over the fence.

Circle the correct verb in each sentence.

I was/were walking down the street. We was/were collecting shells on the beach. They was/were eating popcorn.

# What is the name of the punctuation mark in this sentence?

The dragon (who lived on mountain) scared the whole village.

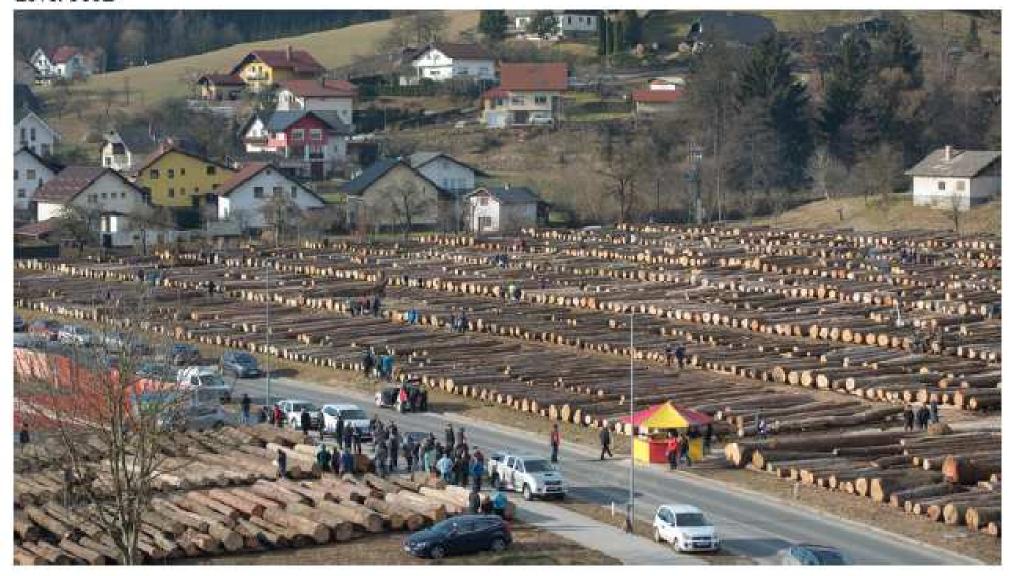
Thursday 14<sup>th</sup> May 2020

Year 5 - 'Life on Earth would not be possible without trees' - Day 4

# SpellingPractise each word. Choose two and write their definitions.Choose two to write in sentences.sacrificesecretaryshouldersignaturesincere/sincerelysoldierstomachsufficientsuggestsymbol

# Life on Earth would not be possible without trees

By National Geographic Society, adapted by Newsela staff on 04.25.19 Word Count 421 Level 560L



There are many reasons to be thankful for trees. The beautiful plants provide homes for animals. They also produce oxygen. Without oxygen, there would be no life on Earth. Trees also supply important products such as wood, paper and fruit.

# NATIONAL GEOGRAPHIC

Unfortunately, only some of Earth's surface is forested. There are three different types of forests. Boreal forests are located the farthest north. Tropical forests are found close to the equator. Temperate forests grow in between these two.

Trees need specific conditions to grow. Healthy soil, sunlight and rainfall are all important. Temperature also matters. Most trees do not grow well in very hot or very cold areas. Trees need conditions that are just right.

Even then, they are not always safe. Trees face a number of threats such as pests. One serious pest

is the mountain pine beetle. It has destroyed many square miles of forest.

# Both Nature And Humans Can Hurt Forests

Another threat to forests is fire. Lightning strikes can set entire forests on fire. Heavy winds can quickly spread a fire. Forest fires have become a big problem in the western United States. Fires are part of the natural cycle in forests. Droughts have become more common, though. So have high temperatures. As a result, forest fires are changing. They are becoming larger and more dangerous.

Less common problems include earthquakes and volcanoes. In 1980, Mount St. Helens erupted in



Washington State. It knocked over thousands of trees. The eruption also caused volcanic mudflows. They ripped trees from the ground and scattered them across the land.

Human activities hurt forests as well. Some forests are cut down for wood or to clear the land. Tree removal is taking place in many regions. It can be harmful to ecosystems. Cutting down forests reduces biodiversity. It destroys habitats and forces animals to move. Cutting down forests is also harmful to the native people who live in or near forests. Many of these people rely on the forest. They need it for food and shelter.

Trees do not grow equally around the planet. Some regions have more forests than others. This inequality has important effects. In areas without forests, there are no forest products to be sold. People in those areas miss out on certain benefits. They miss out on money from tourism. They also do not have the pleasure of being in the forest.

# Quiz

- 1 Why does life on Earth need trees?
  - (A) because trees make oxygen
  - (B) because trees need sunlight
  - (C) because trees help tourism
  - (D) because trees keep us safe
- 2 How do droughts affect forest fires?
  - (A) Droughts help forest fires slow down.
  - (B) Droughts make forest fires smaller.
  - (C) Droughts help forest fires end quickly.
  - (D) Droughts make forest fires worse.
- 3 Read the selection from the section "Both Nature And Humans Can Hurt Forests."

Cutting down forests is also harmful to the native people who live in or near forests. Many of these people rely on the forest. They need it for food and shelter.

## What does the phrase "rely on" mean?

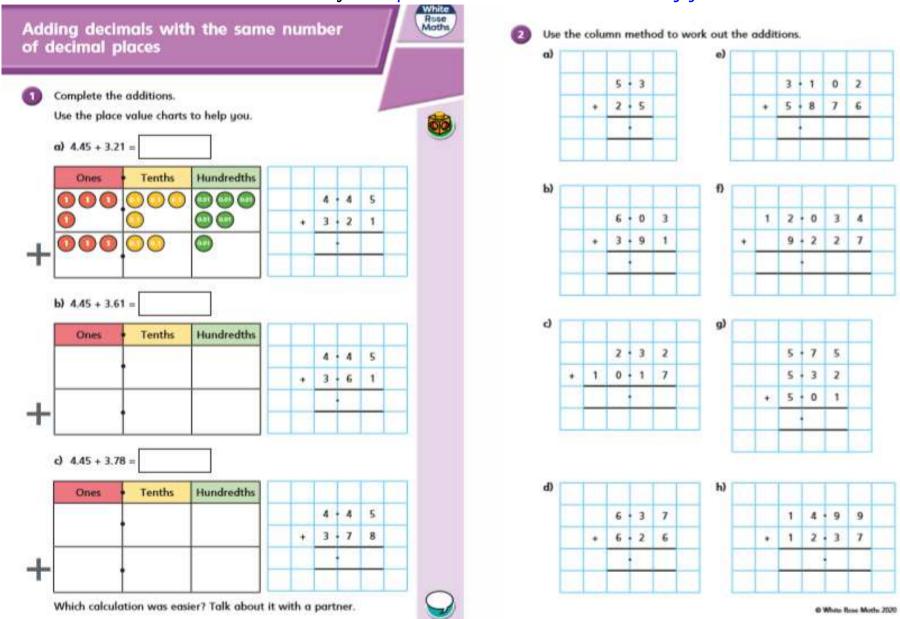
- (A) live on top of
- (B) tear down
- (C) depend upon
- (D) come from
- 4 Read the following selection from the introduction [paragraphs 1-4].

Trees face a number of threats such as pests. One serious pest is the mountain pine beetle. It has destroyed many square miles of forest.

Which word could replace "threats" WITHOUT changing the meaning of the sentence?

- (A) diseases
- (B) dangers
- (C) battles
- (D) animals

Year 5 Home Learning – Maths Lesson One: Adding decimals with the same number of decimal places- Monday 11<sup>th</sup> May 2020 Please watch the video first: https://whiterosemaths.com/homelearning/year-5/



#### Work out the calculations.

Write <, > or = to make the statements correct.

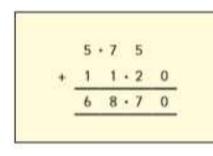


Teddy is working out the total cost of these items.

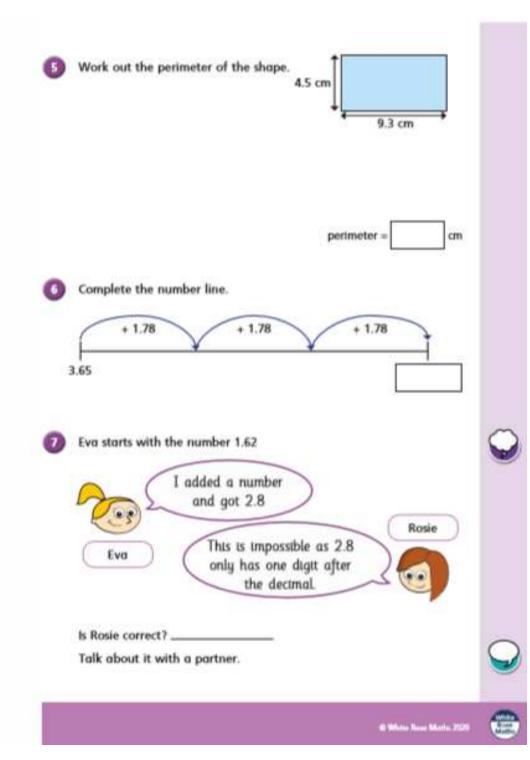




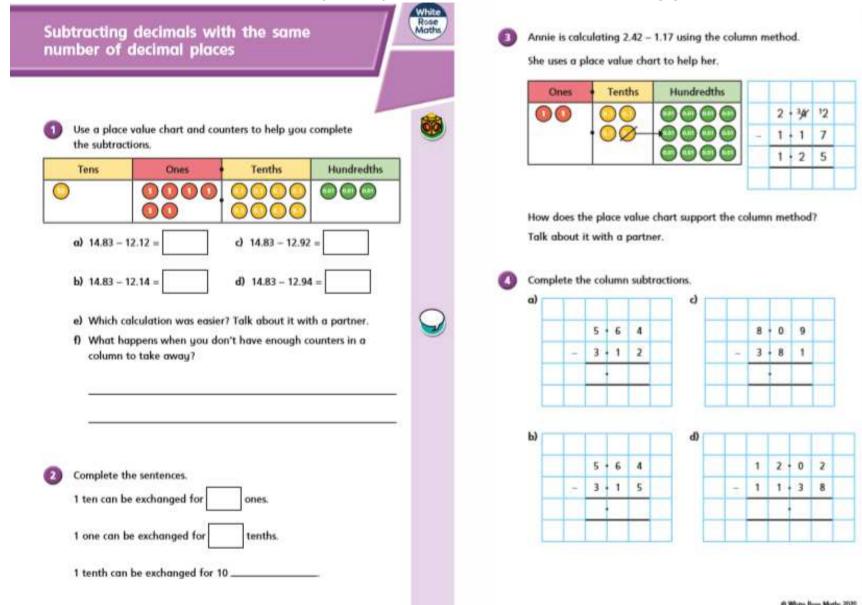
Here are his workings.



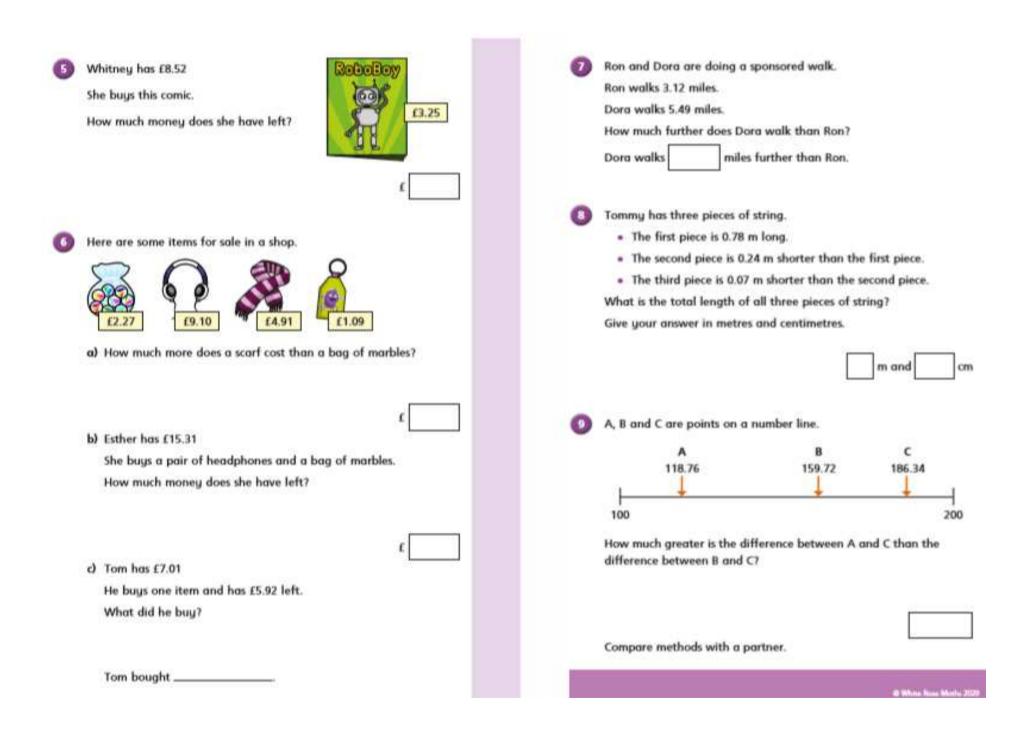
Talk to a partner about Teddy's mistake. Work out the correct answer.



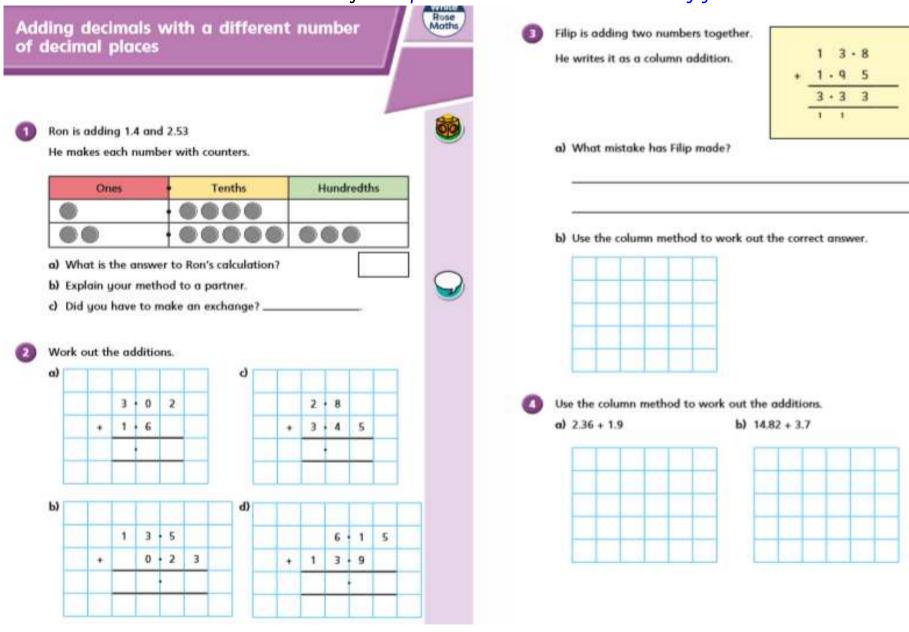
Year 5 Home Learning – Maths Lesson 2:– Subtracting decimals with the same number of decimal places - Tuesday 12th May 2020 Please watch the video first: https://whiterosemaths.com/homelearning/year-5/

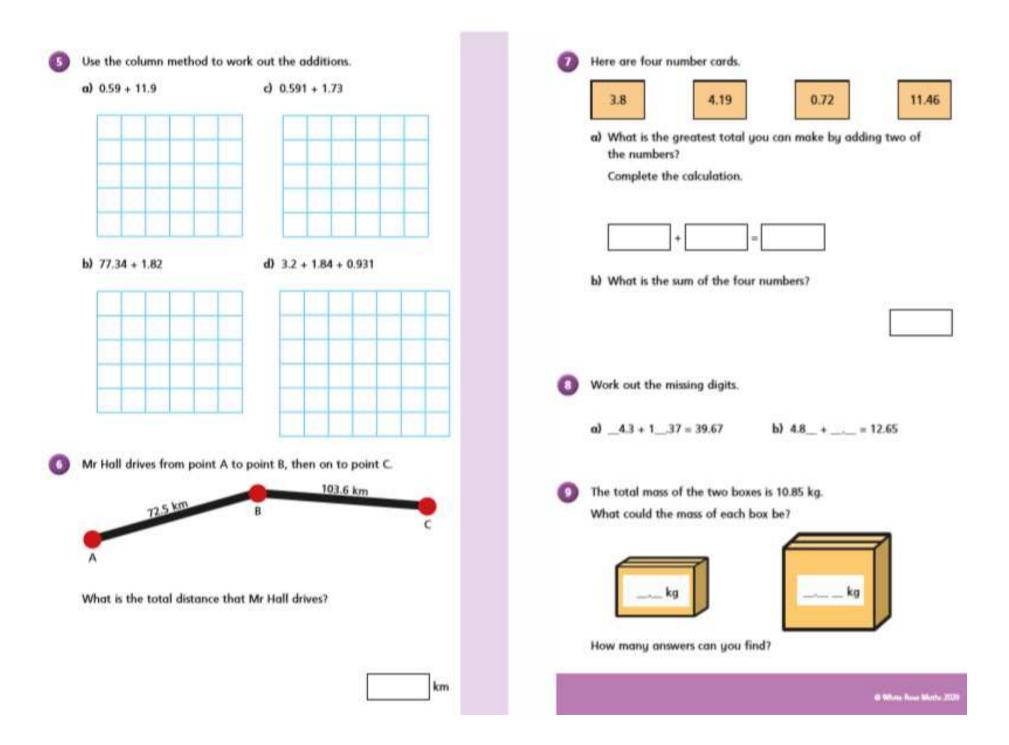


@ White Rose Moths 2020

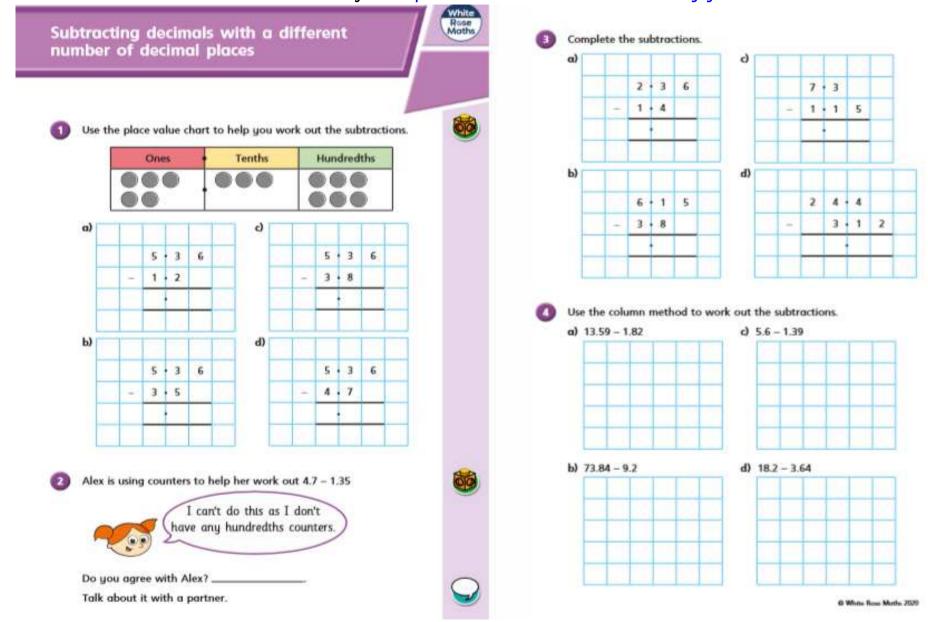


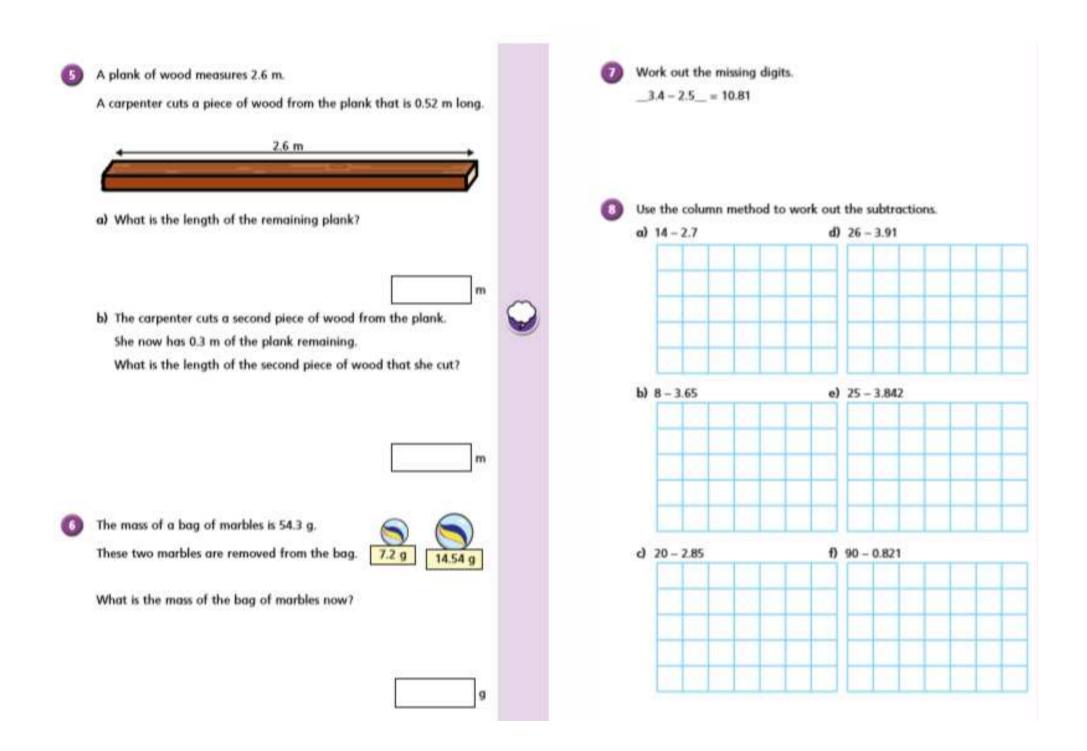
Year 5 Home Learning – Maths Lesson 3: Adding decimals with a different number of decimal places – Wednesday 13<sup>th</sup> May 2020 Please watch the video first: https://whiterosemaths.com/homelearning/year-5/





Year 5 Home Learning – Maths Lesson 4: Subtracting decimals with a different number of decimal places – Thursday 14<sup>th</sup> May 2020 Please watch the video first: https://whiterosemaths.com/homelearning/year-5/





Year 5 Home Learning – Maths Lesson 5: Challenges – Friday 15th May 2020

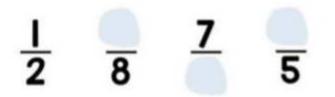
# Challenge 4

Here are 3 containers.



# Challenge 7

Megan puts 4 fractions in order, starting with the smallest.



She has spilt some paint on some parts of the fractions.

What could the missing numbers be?

- The jug can hold 1500 ml.
- The bucket can hold 2 litres.
- The barrel can hold 15 litres.

Anisa wants to fill the barrel with water.

Find 2 ways that Anisa can fill the barrel using the jug and bucket.