



Year 6 Maths

25.01.21 - 29.01.21

This week, we will be learning all about factors, multiples, prime, square and cube numbers in order to prepare us for returning to Fractions next week. This will help you to review and reflect on your learning, as well as challenge you to recall knowledge already learned.

Each day watch the video clip (the link is provided at the top of each page) and complete the challenges.

You also have some challenges assigned to you on Classroom Secrets Kids, which will help you apply your knowledge. Your login details have been sent on Marvellous Me.

If you need to, you can re-watch the video clips as many times as you like to help you! Remember to keep your presentation neat and tidy!

The objectives we are working on are:

- Monday: Recall factors
- Tuesday: Common factors
- Wednesday: Common multiples
- Thursday: Primes to 100
- Friday: Squares and cubes

Please also access Times Tables Rockstars at least twice each week.

Monday Maths: I can find factors of a number



1. Watch the White Rose Maths video first:

<https://vimeo.com/464220956>

2. Complete the two challenges below
3. Log-on to Classroom Secrets Kids and have a go at the 'Factors Maths Challenge'

Factors



- 1 Alex arranges 16 counters in different ways. She is trying to work out some factors.



- a) Use the array to complete the sentence.

and are both factors of 16

- b) Alex rearranges the counters.

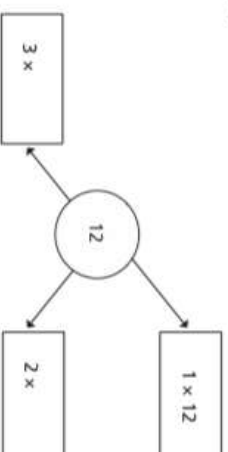


How does this array show that 5 is not a factor of 16?

- 2 Use 20 counters.
- a) Show that 2 and 10 are factors of 20
- b) Rearrange the counters to show why 4 and 5 are also factors of 20
- c) Show why 6 is not a factor of 20



- 3 a) Complete the diagram to show the pairs of numbers that multiply to make 12



List all the factors of 12

- b) Draw a similar diagram to show the pairs of numbers that multiply to make 24



List all the factors of 24

- 4 a) List all the factors of 32
- _____
- b) How can you check that you have found all the factors?
- _____

5 a) Circle the factors of 30

5 15 25 3 30 4 2 12 60 0

b) These numbers are all factors of a 2-digit number.

1 3 5 9

What could the number be?

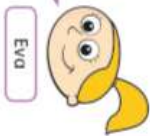
6 Amir and Eva are describing numbers using factors.



Amir

The number 11 does not have any factors.

My number lies between 20 and 25. It only has two factors.



Eva

a) Is Amir correct? _____

Explain your answer.

b) What number is Eva thinking of?

7 Which number has the most factors? Tick your answer.

64

48

8 Look at each statement.

Explain the mistakes that have been made.

a) 20, 30 and 40 are all factors of 10

b) 0.5 is a factor of 8 as 16 halves equals 8

9 How do we know that these statements are true?

a) 5 is a factor of 195 but not a factor of 196

b) 3 is a factor of 177 but not a factor of 178

c) 20 is a factor of 180 but not a factor of 190

10 Is this statement always, sometimes or never true?

A number will always have an even number of factors because factors come in factor pairs.



Year 6 Writing Challenge!

This week you are going to be writing a non-chronological report all about Denmark. You will need to use the Geography learning you will be doing this week along with Literacy, to help you gather together the information. You will need.

Monday - SPAG focus for the week - Complex sentences

A **complex sentence** is made up of a **main clause** and then one or more **dependent clauses**. There are two ways of creating dependent clauses: by adding a **subordinating conjunction** or by adding extra information using a **relative clause**.

Tuesday - Gathering Content

Did you know Britain was once connected to mainland Europe? How are Denmark and Britain different today?

Wednesday - Success Criteria

Read through the non-chronological report example.

Can you highlight the key features?

Thursday - Plan your report

Now plan your non-chronological report all about Denmark.

Friday - Drafting your non-chronological report about Denmark

It is time for you to write your explanation text about day and night. Use Purple Mash 2Do 'All About Denmark' to write your explanation. Don't forget to include complex sentences and use your plan to help you!

Monday - SPAG (Complex sentences)

Task 1: Watch the two videos on the BBC Bitesize website on the link below:

<https://www.bbc.co.uk/bitesize/articles/zbvqkty>

These will give you more information about the three different sentence types: simple, compound and complex.

Task 2: Read through the PowerPoint Slides. These go into more detail about Complex Sentences and what they are made up of (main clause and dependent clauses which include subordinating conjunctions & relative clauses).

We have used these in our writing before Christmas in Year 6 so you should be familiar with these. Our task this week is to make sure we are confident in using complex sentences.

Getting Started

What is a complex sentence?

A **complex sentence** is made up of a **main clause** and then **one or more dependent clauses**.

There are two ways of creating dependent clauses:

- **by using a subordinating conjunction** (e.g. *after*) to create a subordinate clause, e.g.

The horse galloped after it jumped the fence.

- **by adding extra information using a relative clause.**

Mr Richardson, who was feeling ravenous, ate some cheese.

What is a main clause?

A **main clause** (or it could be called a **simple sentence**) is a group of words that expresses one complete thought. Every **main clause** must contain a **subject** and a **verb**. They can also be called **independent** clauses.

subject

The horse galloped.

verb

Mr Richardson ate some cheese.

Next Steps: Subordinating Conjunctions

Firstly, let's look at creating complex sentences by using subordinate clauses that begin with a subordinating conjunction.

I S A W A W A B U B

is an acronym to help you remember the first letters of some of the most important subordinating conjunctions.



If Since As When Although

While After Before Until Because

Subordinating conjunctions are the first words within a subordinate clause. Subordinate clauses do not make sense on their own (they are dependent) but when they are used with a main clause, they create a complex (multi-clause) sentence.

Subordinate clauses will always have a **subject** and **verb** within them, e.g.

<p>before they left</p> <p>↑</p> <p>subordinating conjunction</p> <p>↑</p> <p>subject</p> <p>↑</p> <p>verb</p> <p>is a subordinate clause</p> <p>I SAW A WABUB!</p>	<p>before the holidays</p> <p>↑</p> <p>here 'before' is being used as a preposition</p> <p>is <u>not</u> a subordinate clause</p>
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Next Steps: Relative Clauses

Now, let's look at creating complex sentences by using relative clauses. Relative clauses are a different type of dependent clause that give more detail about the subject of the main clause.

Relative clauses begin with a relative pronoun or a relative adverb. Here are some of the most common examples:

who

which

whose

whom

that

where

who

which

whose

whom

that

where

Can you spot the relative clause in this complex sentence?
What is the relative clause describing?

Mysterious Malcolm, **who is a children's entertainer**, wows his audiences with his magic tricks.

The relative clause describes the 'Mysterious Malcolm' in more detail. When a relative clause is embedded in the middle of a sentence, we surround it with commas.

The astronaut bounded towards the space buggy, **which had been parked in a crater**.

The relative clause describes the 'space buggy' in more detail. When a relative clause is dependent on the main clause, we add a comma to demarcate it from the rest of the sentence.

Complex Sentence Hunt

Why aren't these sentences complex?

The sun was beginning to disappear behind the nearby mountain...

This is just a main clause (or you might call it a simple sentence). It is extended by using a prepositional phrase 'behind the nearby mountain', but this doesn't make it a complex sentence.

Philip shouted for help but it was hopeless.

This is a different type of multi-clause sentence: a compound sentence. It has two main clauses that are joined by a co-ordinating conjunction.

It was going to be a long night.

This again is just a main clause (simple sentence). It is still a good idea to include some of these in your writing for effect.

Monday Complex Sentences Challenge!

Spot the Complex Sentences

A complex or multi-clause sentence is made up of a main clause and then one or more dependent clauses.

There are two ways of creating dependent clauses:

- by using a subordinating conjunction (e.g. after) to create a subordinate clause, e.g. The horse galloped after it jumped the fence.
- by adding extra information using a relative clause that starts with a relative pronoun or relative adverb (e.g. who), e.g. Mr Richardson, who was feeling ravenous, ate some cheese.

1. Fish have gills because they need to breathe underwater.	Is it a complex (multi-clause) sentence?
Explanation:	Yes <input type="checkbox"/> No <input type="checkbox"/>
2. After we have eaten dinner, we are going to take a stroll along the beach.	Is it a complex (multi-clause) sentence?
Explanation:	Yes <input type="checkbox"/> No <input type="checkbox"/>
3. The elephant trumpeted at the top of its lungs, which made everyone jump.	Is it a complex (multi-clause) sentence?
Explanation:	Yes <input type="checkbox"/> No <input type="checkbox"/>
4. Martha's passport had expired so she needed to get a new one before her holiday.	Is it a complex (multi-clause) sentence?
Explanation:	Yes <input type="checkbox"/> No <input type="checkbox"/>

5. Carrie lives on Green Lane in Haversham.	Is it a complex (multi-clause) sentence?
Explanation:	Yes <input type="checkbox"/> No <input type="checkbox"/>
6. The moonlight shone down.	Is it a complex (multi-clause) sentence?
Explanation:	Yes <input type="checkbox"/> No <input type="checkbox"/>
7. Leon hurriedly completed his homework and he handed it to his teacher.	Is it a complex (multi-clause) sentence?
Explanation:	Yes <input type="checkbox"/> No <input type="checkbox"/>
8. Henry, who is in my class, is an expert at times tables.	Is it a complex (multi-clause) sentence?
Explanation:	Yes <input type="checkbox"/> No <input type="checkbox"/>
9. I always order a cheeseburger when we go to fast food shop.	Is it a complex (multi-clause) sentence?
Explanation:	Yes <input type="checkbox"/> No <input type="checkbox"/>

Challenge

Invent your own complex (multi-clause) sentence:





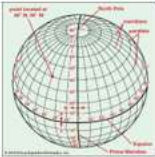
Sentence:	Is it a complex (multi-clause) sentence?
Explanation:	Yes <input type="checkbox"/> No <input type="checkbox"/>

Year 5 and 6 Weekly Topic Mat

Our Geography topic is a European Study of Denmark



Did you know Britain was once connected to mainland Europe? How are Denmark and Britain different today?

Vocabulary	
Land border	The line dividing line between two countries.
Population	The number of people living in a particular place.
Currency	A system of money used in a particular country.
Latitude	The distance north or south of the equator.
Longitude	The distance east and west of the Greenwich meridian.
5 Finger Facts	
I know that Denmark is a country in Europe.	
I know that the North Sea and Baltic Sea border Denmark.	
I know that Denmark has one land border and it is with Germany.	
I know that Britain is approximately six times bigger than Denmark.	
I know that Denmark is on the same latitude line as Scotland.	
This week's activities	
<p>Can you identify the different continents of <u>the</u> world? Can you identify Britain and Denmark <u>within</u> Europe?</p> 	<p>Can you identify the human and physical features of <u>Denmark</u>?</p> 
<p>Can you compare the geographical features of <u>Denmark</u> to the geographical features of the UK?</p>  	<p>Discovering all about the lines of latitude and longitude!</p> 
<p>At the end of the week, you will be using your knowledge and skills to write a postcard to a friend to describe the different geographical features of Denmark. You can also include different places you have visited as well!</p>	

Monday- Geography

Your first challenge is to identify the continents of the world. Can you label them on the world map? You need to know all of the continents of the world and their location!

What Is a Continent?

A continent is a very large landmass. A continent is usually separated by water or other natural features, like mountains.

There are seven continents in the world:

1. Asia
2. Africa
3. North America
4. South America
5. Antarctica
6. Europe
7. Australasia



Let's Find Out More!

Did You Know?
Continents only cover 29% of the Earth. The rest of the Earth's surface is water!

Asia

Asia is the biggest continent in the world.

- 2/3 of the world's population live in Asia.
- Major countries include India and China.
- The Himalayas, the world's tallest mountains, are found here.
- The Dead Sea, the lowest point on land, is also in Asia.
- Asia is home to tigers, monkeys and giant pandas.



Africa

Africa is the second biggest continent in the world.

- Africa has 54 countries, more than any other continent.
- Major countries include Egypt, Nigeria and South Africa.
- The River Nile in Africa is thought by many to be the longest river in the world, although some claim the longest is the River Amazon in South America.
- Africa also has the world's biggest non-polar desert, the Sahara.
- In Africa, you will find giraffes, elephants and lions.



North America

North America is the third biggest continent in the world.

- Major countries in North America include the USA and Canada.
- Pumpkin and corn originally came from here.
- North America is home to bears, moose and skunks.



South America

South America is the fourth biggest continent in the world.

- South America only has 12 countries.
- Major countries include Brazil and Argentina.
- The Amazon, the world's biggest rainforest, is found here.
- Tomatoes, potatoes and chocolate all come from South America originally.
- South America is where you will find llamas, sloths and jaguars.



Antarctica

Antarctica is the third smallest continent in the world.

- Antarctica is almost completely covered in ice.
- It is surrounded by the Southern Ocean.
- It is the coldest and windiest continent.
- Each year, hundreds of scientists live and work in Antarctica.
- Antarctica is home to penguins, albatross and seals.



Europe

Europe is the second smallest continent in the world.

- Europe has 44 countries altogether.
- Major countries include France, Germany and the United Kingdom.
- Apples, pears and raspberries all originally come from Europe.
- The majority of Australians have ancestors from Europe.
- Europe is home to foxes, wolves and bears.



Australasia

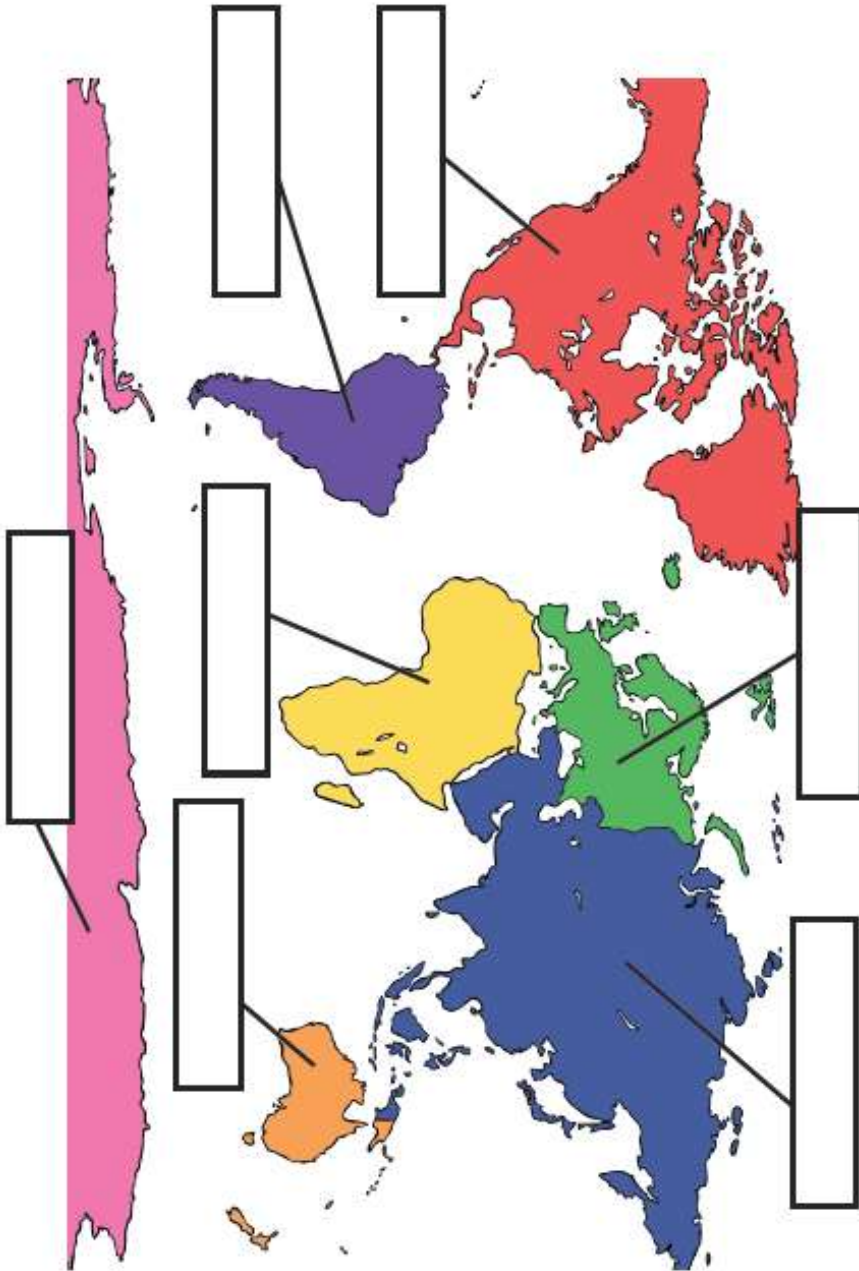
Australasia is the smallest continent in the world.

- Australasia is sometimes called an island-continent.
- The Great Barrier Reef, the world's largest coral reef, is in Australasia.
- Australasian Aboriginal people first came to Australasia more than 50 000 years ago.
- The continent nearest to Australasia is Asia.
- Australasia has many unique animals including kangaroos, koalas and emus.



Monday Challenge One (Geography)

The Seven Continents of the World



Word Bank
North America
South America
Africa
Antarctica
Australasia
Europe
Asia

Monday (Geography)

Your second challenge...using the map of Europe below, identify the location of Denmark and Britain within Europe. Can you label the different seas which border Denmark?

Map of Europe





Tuesday Maths: I can find common factors

1. Watch the White Rose Maths video first:

<https://vimeo.com/464241360>

2. Complete the two challenges below
3. Log-on to Classroom Secrets Kids and have a go at the 'Common Factors Reasoning Practice'

Common factors



- 1** a) Use 18 counters or cubes.

Make as many different arrays as possible, using all the cubes or counters.

Use your arrays to help you list the factors of 18

The factors of 18 are _____

- b)** Use 24 counters or cubes.

Make as many different arrays as possible, using all the cubes or counters.

Use your arrays to help you list the factors of 24

The factors of 24 are _____

- c)** What are the common factors of 18 and 24?

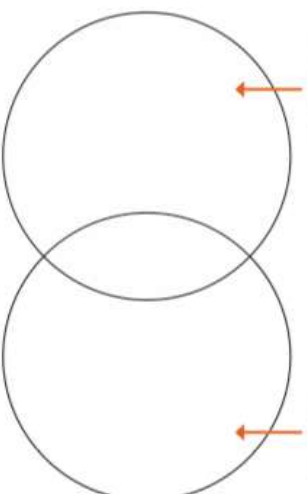


- 2** Write the numbers in the sorting diagram.

1 2 3 4 5 6 8 12 15 24

factors of 15

factors of 24



Complete the sentence.

The common factors of 15 and 24 are _____

- 3** Find the common factors of each pair of numbers.

- a)** 12 and 20

- b)** 16 and 25

- c)** 20 and 50

- d)** 20 and 60

- 4 a) Complete the table.

Factor pairs of 50	Factor pairs of 75	Factor pairs of 100
1×50 2×25 5×10	$1 \times$	

- b) What are the common factors of 50, 75 and 100?

- 5 List 3 common factors of 360 and 180 that are greater than 50

- 6 Alex is making party bags.

She has 35 sweets and 25 balloons.
 The sweets and balloons need to be shared equally, so that each bag has the same number of sweets and balloons.

I can put 5 sweets and 5 balloons in each bag because 5 is a common factor of 35 and 25



Is Alex correct? _____

Explain your answer.

- 7 I am thinking of a 2-digit number.

Annie

My number has a factor of 7 in common with Annie's number.



Dexter

The common factors of my number and Annie's number are 1, 5 and 10

Ron

What number is Annie thinking of?

- 8 Whitney is trying to simplify these fractions.

$$\frac{18}{46} \quad \frac{24}{81} \quad \frac{40}{100}$$

I can use common factors to work out how to simplify these fractions.



Show how Whitney's method could work.

Talk about your answer with a partner.

Tuesday Literacy - Gathering Content

Read the fact file below out Denmark.

Denmark



Population: 5.7 million (2020)
Capital City: Copenhagen
Languages: Danish
Continent: Europe
Government: Social Democrat coalition
National Day: 5th June
Religion: Christianity (Church of Denmark)



Climate
Denmark's climate is very changeable because of its location. In the winter, the temperatures drop so much that lakes freeze and there is lots of snow. In February, temperatures drop to -3°C. The summers are mild with temperatures reaching 13°C in July.

Then, visit the website below to do your own research about Denmark!

<https://kids.nationalgeographic.com/explore/countries/denmark/>

Tuesday task (Literacy)- Write notes below about everything you have learnt about Denmark

Tuesday Challenge (Geography)

Look at these aerial photographs of Denmark. What physical features (things which have occurred naturally) can you spot? What human features (things we have been created by humans) can you spot?





bwc9508130 Barewalls


I can identify the physical and human features of Denmark

Physical features	Human features

Wednesday Maths: I can find common multiples

1. Watch the White Rose Maths video first:
<https://vimeo.com/465048249>
2. Complete the two challenges below
3. Log-on to Classroom Secrets Kids and have a go at the "Multiples Game"

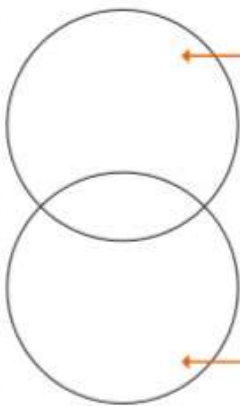
Common multiples



1 Shade all the multiples of 9
Circle all the multiples of 6

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

List any common multiples of 9 and 6

- 2** d) Write the numbers in the sorting diagram.
- 25 30 16 20 24 60 75 40
- multiples of 5
- multiples of 4
- 
- 3** d) Look at the common multiples of 4 and 5 from part b).
What do you notice?
Describe how to find more common multiples to add to this list.
Would you ever run out of common multiples?
- e) Continue the lists of multiples.
- Multiples of 5**
5, 10, 15, , , , , , ,
- Multiples of 7**
7, 14, 21, , , , , ,
- b) Circle the common multiples of 5 and 7

4

I worked out the common multiples of 4 and 6 by multiplying 4 and 6 together to get 24. Then I added on 24 again and again: 24, 48, 72 . . .



Jack

Who do you agree with and why?

I think your method might miss some common multiples.



Rosie

5

Write the first five common multiples of these numbers.

a) 2 and 3

b) 3 and 12

c) 15 and 10

6

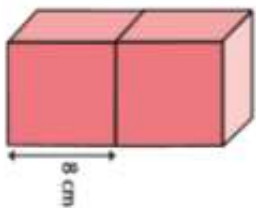
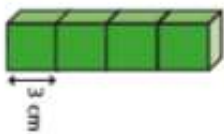
Rita has two grandchildren in different years at school. On Rita's 90th birthday she says to her grandchildren,

"My age is a multiple of both your ages today."

How old could Rita's grandchildren be?

Describe two different solutions.

7



Scott is building a tower from blocks 3 cm tall.

Dora is building a tower from blocks 8 cm tall.

They each build a tower taller than 50 cm, but shorter than 1 m.

The towers are exactly the same height.

How tall could the towers be?

Wednesday (Literacy) - Success Criteria

What is a [non-chronological report](#)? A non-chronological report is a piece of non-fiction writing usually focussing on a particular topic or even in history that is not written in time order.

Task: Read through this non-chronological report and identify the different features which I have included.

Success criteria:

Title

Introduction

Sub-headings

Summary

Images

Complex sentences

The Pyramids of Ancient Egypt

The pyramids were tombs that were built for the pharaohs- the kings. The size of their pyramid is believed to signify the level of importance of the person entombed inside. Due to their belief that a mummified person would live forever, the ancient Egyptians built these tombs to keep their bodies safe when they departed from the world.

It is not known how many men it took to build a pyramid, with estimates ranging from 2,000 to 100,000! Pyramid building would always happen when the Nile was flooded which is thought because the water was used to transport the stone.

The Tomb

Although the pyramids look quite simple, inside they had various passages and chambers, some with secret entrances and trapdoors.

The mummified body of the pharaoh would be placed in a sarcophagus (a large stone coffin), which was then surrounded by other chambers containing precious items that were thought to be needed in the afterlife. Other chambers might be used for family members.

Hieroglyphics

The chambers and passages were intricately decorated with pictures and hieroglyphics. At the Pyramid of Unas, many hieroglyphics were found- they are believed to tell stories of the King, religious tales, requests for help from the gods in the journey to the afterlife and serve as a warning to grave robbers.

Where Are The Most Famous Pyramids?

The most famous pyramids are those in Giza. The 'Great Pyramid of Giza', which is the largest of the pyramids, was built for Pharaoh Khufu. It took over 20 years to build and stood over 140 meters high, with many smaller pyramids surrounding it. Because the outer layer of stone has worn down, the pyramid now has a rough, rocky surface. However, when the pyramid was originally built, it would have had an outer layer of stone with a smooth appearance. This pyramid is one of the 'Seven Wonders of the Ancient World'; in fact, it is the only one still standing. Built over 4,500 years ago, this pyramid was the tallest man-made structure in the world until the 1300's. Approximately 2,300,000 limestone blocks were used, each weighing on average 2.5 tons.



Wednesday- Handwriting practice

o

o o o o

ou ou ou

on on on

ot ot ot

of of of

ot ot ot

only only

out out

onto onto

open open

Wednesday Challenge- Geography

I can compare Denmark and Britain

Denmark and Britain are both countries in Europe. In what ways are the two countries geographically similar and different? You may want to think about their human and physical features. Use the aerial photographs from yesterday about Denmark and the photographs below (which are of Britain) to help you.

These links will also help you:

<https://kids.nationalgeographic.com/explore/countries/denmark/>

<https://kids.nationalgeographic.com/explore/countries/united-kingdom/>





Wednesday- Forest School task



Hi all, we hope you have had great fun in the snow. As the ground has been covered in snow, many berries have been eaten and minibeasts are hibernating, our garden birds are getting hungry and need some energy. Some birds have migrated, flying to warmer countries to survive. Other birds have arrived here for the winter, migrating from even colder countries.

The birds need your help to survive the winter so this week we are asking you to make a simple bird feeder for your garden. We have included a selection of feeders because we know you may not have all of the equipment at home. Be creative and do your best with the materials you have and combine ideas from different feeders. If you invent a new type of feeder please share it with Mrs Goss via our class teacher.



During the week beginning 29th January we will be asking you to identify birds in your garden or in an outdoor space near your house. You can ask your parents to sign up ready to the Big Garden Bird Watch and help the RSPB count and monitor the population of birds in our country. If you put your feeders out now and keep topping them up, hopefully you will have lots of birds visiting your garden by the end of the month. Once the birds know there is food they will keep visiting every day!
Join the bird watch @www.rspb.org.uk and follow the link to register.

Bird Cake feeder

How to make a bird cake feeder:

You will need:

- Bird seed
- Lard
- Cutlery knife
- Bowl
- Pine cone or stick
- String



Method:

- Cut off a chunk of lard and put in the bowl.
- Add several handfuls of seeds.
- Using your hands (or a spoon) mix the lard and seeds together so it is gooey and the seeds are all mixed in. Add more seed if required.
- Tie string to the top of your stick or pine cone so you can hang it to a tree.
- Finally cover your stick or pine cone with your bird cake and tie to a tree.

For an extra treat you can add grated cheese and raisins to your recipe.

Fruit kebabs:

How to make fruit kebab feeders.



You will need:

- *Either wire or metal/wooden kebab skewer or metal coat hanger or string and needle*
- *String*
- *Scissors*
- *Fruit cut into pieces (adult supervision required) eg apple, orange, pear*
- *Whole grapes and raisins (if you have them)*

Method:

- *Thread your fruit onto your chosen wire/string/skewer.*
- *If your material can bend then make it into a loop and tie/twist it at the top. Attach string to tie it up.*
- *If your material is rigid you can tie string to the top to hang it to the tree (make sure your fruit can not slip off) or tie string on either end to make a perch.*
- *Hang your feeder in your garden and watch over time to see if the birds come.*



Toilet Roll Bird Feeder:

You will need:

- *Toilet roll tube*
- *String*
- *Scissors*
- *Peanut butter (use only in your own garden and if no nut allergies)*
- *Bird seed*



Method:

- *Spread peanut butter onto the toilet roll tube using a cutlery knife.*
- *Roll the tube in the seeds until covered.*
- *Put string through the middle of your tube and tie at the top.*
- *Hang in your garden.*



Please be aware of peanut allergies. We don't make these feeders in school.

Cherio Bird Feeder:

You will need:

- *Wire (or pipe cleaner)*
- *Cherrios*
- *Extra small treats such as blueberries or raisins (optional)*
- *String*
- *Scissors*



Method:

- *Thread the cherrios and optional fruit onto the wire or pipe cleaner. Make an interesting shape- hearts work well.*
- *Twist the wire at the top to secure and so your cherrios do not fall off.*
- *Tie string to the top and hang in your garden.*

Challenge- can you link shapes together like this:



Please remember to remove any materials that are not biodegradable (do not rot away) once your feeders have been eaten but it is even better to keep refilling them and feeding the birds every day!



Thursday Maths: I can identify prime numbers to 100

1. Watch the White Rose Maths video first:
<https://vimeo.com/465049678>
2. Complete the two challenges below
3. Log-on to Classroom Secrets Kids and have a go at the 'Factors, Multiples and Prime Numbers Maths Challenge'

Primes to 100

- 1 a) Find the factors of these numbers,

6 8 9

The factors of 6 are _____.

The factors of 8 are _____.

The factors of 9 are _____.

- b) Find the factors of these numbers.

3 5 7

The factors of 3 are _____.

The factors of 5 are _____.

The factors of 7 are _____.

- d) What is the same and what is different about your answers to part a) and part b)?

Complete the sentence.

All the numbers in part b) are _____ numbers.



- 2 How can you prove that 18 is not a prime number?

- 3 Circle the prime numbers in each list.

a) 1 2 3 4 5 6 7

b) 17 22 9 36 21 35 23

c) 10 18 38 74 92 2 14

- 4 a) Many people think that 1 is a prime number.
Explain why 1 is not a prime number.

b) Many people think that 2 is not a prime number.
Explain why people might think this.

- 5 Write ten numbers in the sorting diagram. Each section must have at least one number.

	Even	Not even
Prime		
Not prime		

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50

6

Cross out all the numbers that are **not** prime numbers.

List the prime numbers between 0 and 50

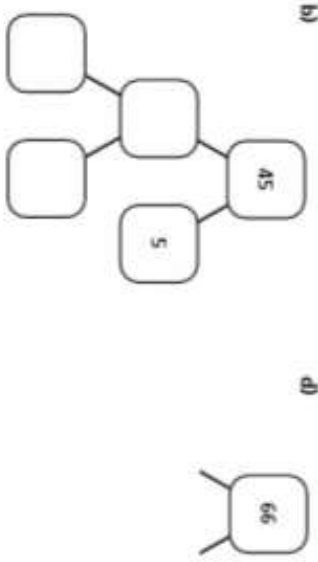
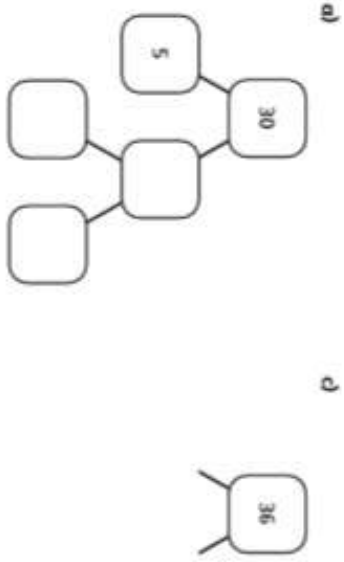
7



Do you agree with Rosie? _____
 Test whether or not 87 is a prime number and show your reasoning.

8

Complete the prime factor trees.



9

 +  = 100

Both  and  are prime numbers.
 How many different solutions can you find?

Thursday (Literacy)- Planning the report

I can plan a non-chronological report about Denmark

Non-Chronological Report

Title: _____

Introduction:

Sub-heading: _____

Sub-heading: _____

Fun Fact!

Sub-heading: _____

Thursday Challenge- Geography

Today you are going to find out all about the lines of longitude and latitude.

To begin, watch this clip:

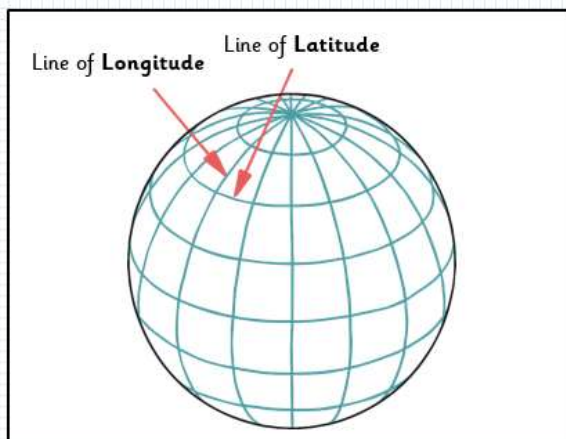
<https://www.bbc.co.uk/bitesize/topics/zvsfr82/articles/zd4rmfr>

Now look at these slides, which go into more detail about latitude and longitude.

How is it possible to find the exact location of a place on Earth?

Latitude and Longitude

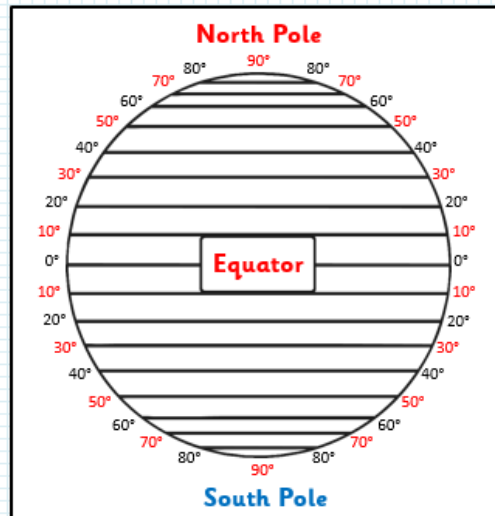
Invisible lines of latitude and longitude form a grid over the Earth. These lines help to create a co-ordinate to locate a place accurately.



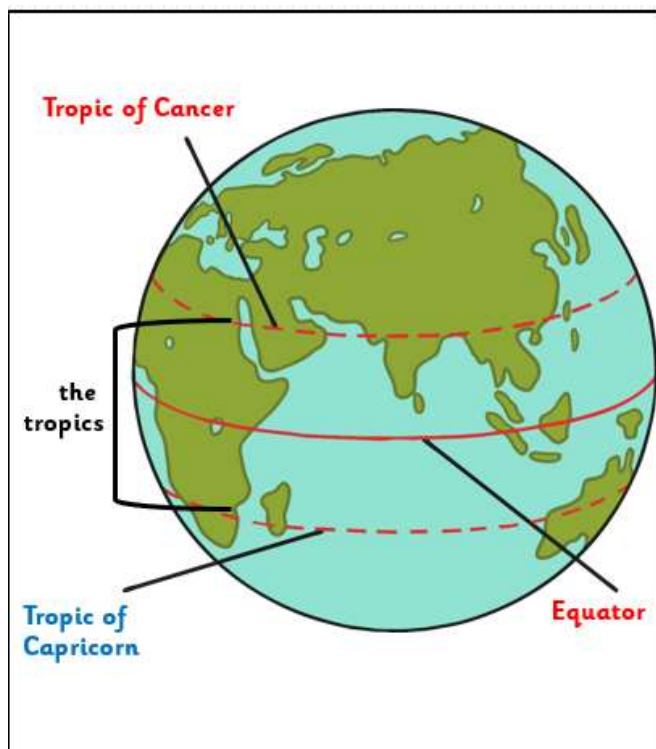
Latitude

Lines of latitude (also known as **parallels**) circle the Earth from east to west. These invisible lines are all the same distance apart. One line to the next is known as 1 degree.

- Each degree of latitude is separated into smaller divisions called minutes.
- There are 60 minutes in 1 degree.
- Each minute is divided into 60 seconds (not always included within the coordinate).
- As you can see from the diagram, the Equator lies at 0 degrees.



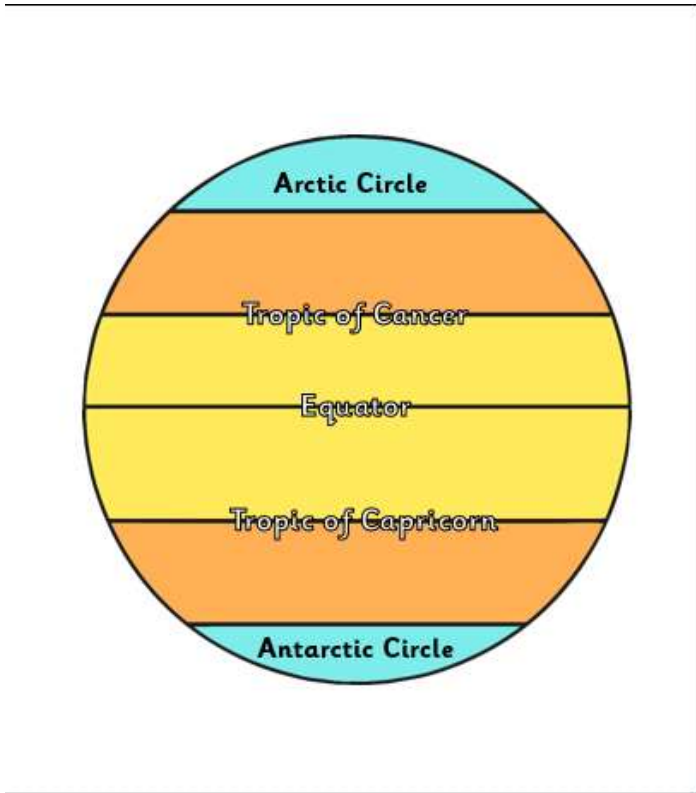
The Equator is an important line of latitude. It is an imaginary line half way between the North and South Poles. Countries near to the Equator are very hot as this is the Earth's closest point to the Sun.



Other Important Lines of Latitude

The **Tropic of Cancer** lies at **23.5 degrees north** and the **Tropic of Capricorn** lies at **23.5 degrees south** of the **Equator**.

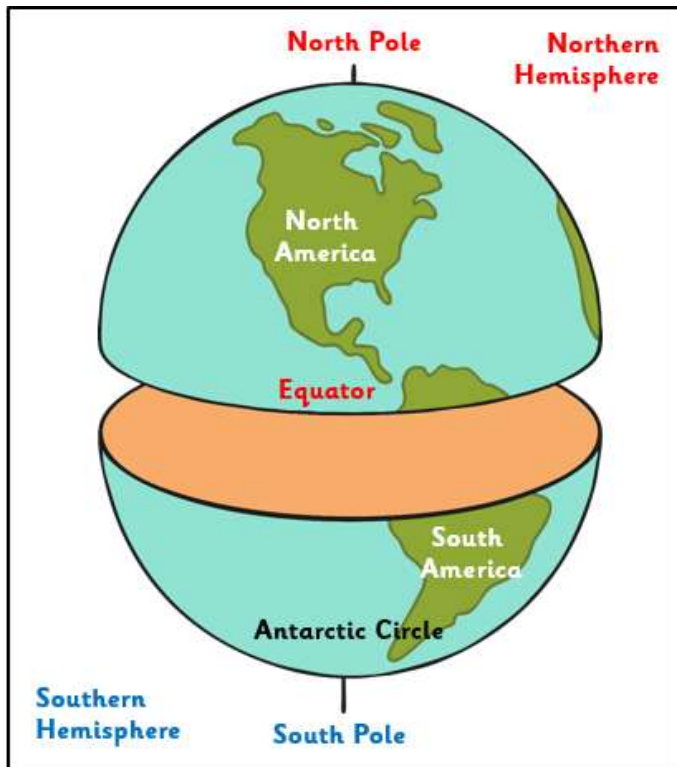
The area of the Earth which lies between both of these lines is called **the tropics**.



Other Important Lines of Latitude

The **Arctic Circle** lies at **66.5 degrees north** whilst the **Antarctic Circle** lies at **66.5 degrees south**.

The areas in blue and orange are those which have 4 distinct seasons.

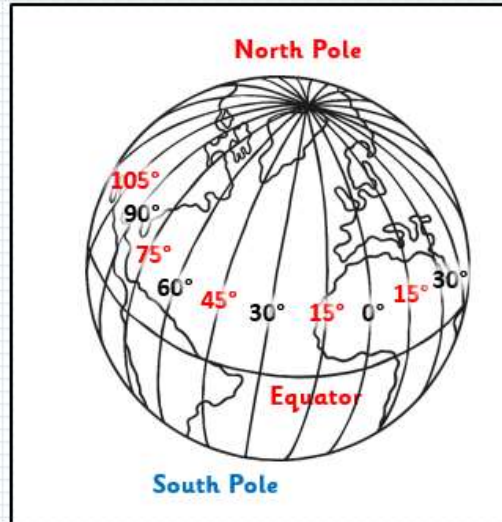


Imagine the Earth cut in half...

The **Northern Hemisphere** is anywhere north of the Equator whilst the **Southern Hemisphere** is anywhere south of the Equator.

Longitude

- These are the lines which run north and south and are known as lines of longitude or meridians of longitude. These lines are measured in the same way as the lines of latitude.
- Lines of longitude are not equal distances (equidistant) from each other.
- The Prime Meridian or Greenwich Meridian line is a line of longitude at 0 degrees.
- It passes right through Greenwich in London.

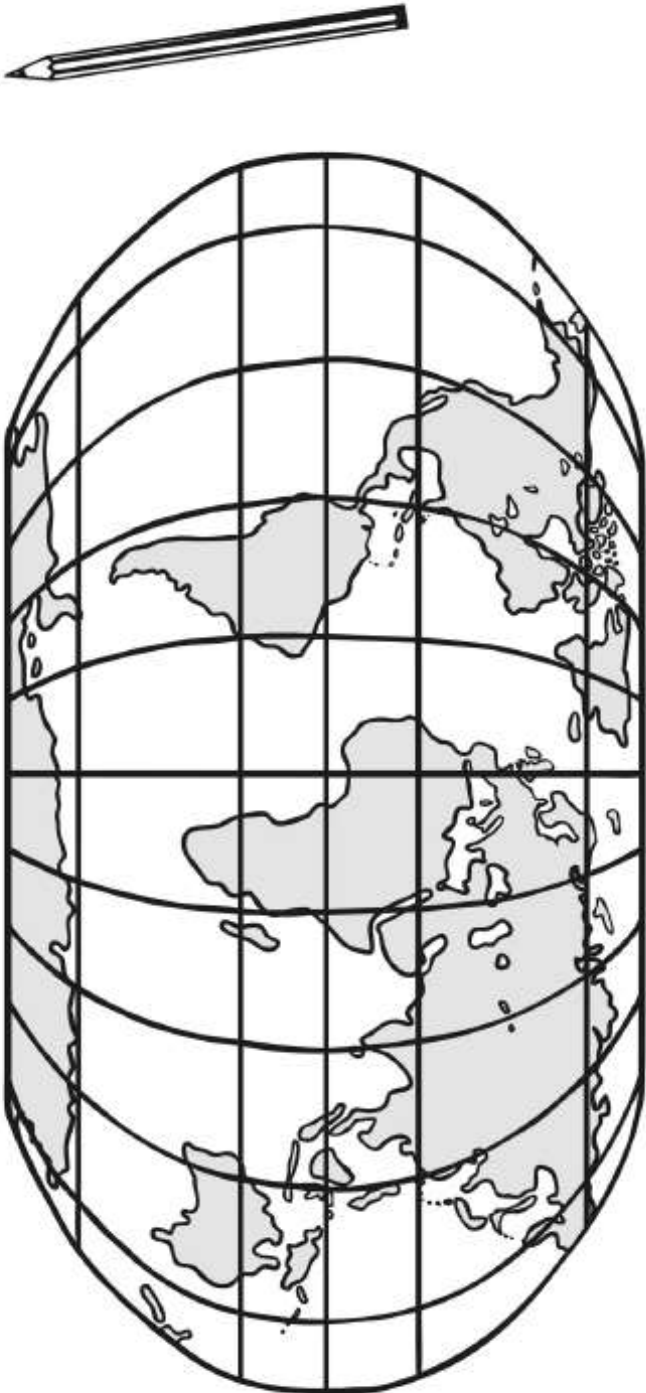


Geography Challenge

The Earth

Look at the lines on the map. Which goes where?

Label using these terms: Equator, Northern Hemisphere, Southern Hemisphere, Tropic of Cancer, Tropic of Capricorn, Arctic Circle, Antarctic Circle, Greenwich Meridian, Prime Meridian.





Friday Maths: I can find square and cube numbers

1. Watch the White Rose Maths video first:
<https://vimeo.com/465336467>
2. Complete the two challenges below
3. Log-on to Classroom Secrets Kids and have a go at the '**Square** Numbers Maths Challenge'
4. BONUS challenge on Classroom Secrets Kids: '**Cube** Numbers Maths Challenge'

Square and cube numbers

White
Race
Months

- 1 Use counters to show that 4, 9 and 16 are square numbers.
Draw your answers.



- 2 Match the representations.



4 cubed



3 squared



4 x 4



2^3

- 3 Here is a 2 x 2 x 2 cube.



How many cubes do you need to build a 3 x 3 x 3 cube?

- 4 Complete the table.

2^2	2×2	4
2^3	$2 \times 2 \times 2$	
3^2		
3^3		
<input type="text"/>		25
	$5 \times 5 \times 5$	

5 Write $<$, $>$ or $=$ to complete the statements.

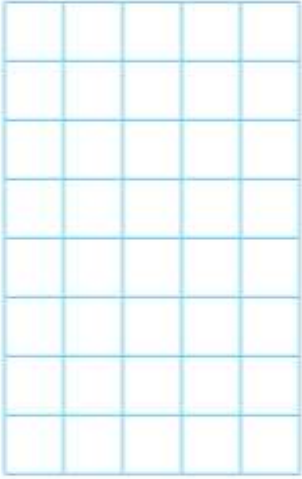
2 squared 2 cubed

2 squared 2×2

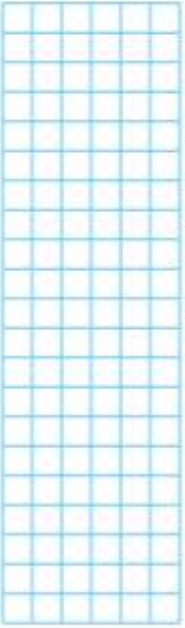
2 squared 4

2 squared 1 cubed

6 Draw 3 straight lines to split this grid into 3 squares and 1 rectangle.



7 Find four square numbers between 100 and 200



8 Dexter works out 20 squared.

Annie works out 20 cubed.

Find the difference between Dexter's and Annie's numbers.

9 a)

I am thinking of 2 numbers. When I add them I get a prime number. When I multiply them I get a square number.



What numbers could Mo be thinking of?

b)

I am thinking of 2 numbers. When I add them I get a square number. When I multiply them I get a prime number.

What numbers could Alex be thinking of?

Friday Literacy - Drafting the non-chronological report

On Purple Mash, you have been set a 2Do called 'All About Denmark'. In this template, I would like you to write your non-chronological report all about Denmark. Don't forget to include your complex sentences and use your plan to help you!

Friday- handwriting

q

q q q q

qu qu qu

quiz quiz

quit quit

quite quite

queue queue

queen queen

quick quick

quicker quicker

quickest quickest

Friday Challenge- Geography

Now you have found out all about Denmark, it's time to write a postcard to a friend. Imagine you have travelled to Denmark on holiday.

Here is a clip all about Copenhagen:

<https://www.youtube.com/watch?v=B4jdGijZxNg>

Use the Purple Mash postcard tool to write a postcard for a friend about your holiday in Denmark.

Mindfulness Doodling

