Multiplication and	l Division	Knowledge Organiser
Key Vocabulary	Factors	Prime Numbers
multiply	A factor is a number that divides into another number exa without leaving a remainder.	actly, 1 2 3 4 5 6 7 8 9 10
groups of	A common factor is a factor of 2	
lots of	or more numbers	
times	Factors of 6  1 2 4 5 10 20 2	41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60
divide	The factors of 20 are 1, 2, 4, 5, 10 and 20.	61 62 63 64 65 66 67 68 69 70
share	The factor pairs are: 1 and 20 2 and 10 5	71     72     73     74     75     76     77     78     79     80       81     82     83     84     85     86     87     88     89     90
remainder	4 and 5 Factors of 15	91 92 93 94 95 96 97 98 99 100
factor	Squared <sup>2</sup> and Cubed <sup>3</sup> Numbers	Related Calculations
multiple		8 × 9 = 72 9 × 8 = 72
product		80 × 9 = 720 90 × 8 = 720
	$2^2 = 4$ $2^3 = 8$ $5^2 = 25$ $5^3 = 125$	700 0 00 700 0
twinkl visit twinkl.com	2 × 2 = 4	125

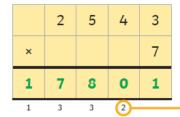
## **Multiplication and Division**

Knowledge Organiser

# **Short Multiplication**

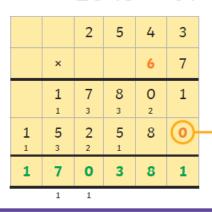
# Long Multiplication

$$2543 \times 7 = 17801$$



Remember to move any regrouped digits into the next column. After the next multiplication, add the regrouped number to the answer.

# $2543 \times 67 = 170381$



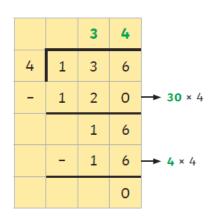
Before multiplying by the number in the tens column, remember to use zero as a placeholder because the 6 in 67 is 6 tens (60).

### Division

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### **Short Division**

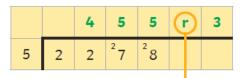
# $136 \div 4 = 34$



4 1 5 3			3	8
	4	1	<sup>1</sup> 5	32

15 ÷ 4 = 3 remainder 3

Remember to regroup any remainders and move them into the next column.



28 ÷ 5 = 5 remainder 3

If your calculation has a remainder, remember to record it in the answer using the letter **r**.



Use a mixture of simple, compound and complex sentences. Use a thesaurus to up-level your vocabulary choices.

Check for tense, subject/verb agreement, person, paragraphs and genre features!

### Marvellous Modals!

Include modal verbs to show possibility:

can could should might must may would will ought

(and their negative versions)

Could you pop in an adverb of possibility?

surely possibly certainly perhaps

### Super Suffixes!

-ation preparation sensation-ous courageous curious serious-ly gently angrily frantically

### Super Subordination!

Use these conjunctions to create super complex sentences:

if because as before after until that since when

#### Front it Out!

Link your sentences and paragraphs:

#### Time

At that moment, On Saturday, Finally,

#### Place

Over the bridge, Inside the chest, Beyond the clouds,

#### Frequency

Every few weeks, Never before, Occasionally, Often,

#### Manner/ Behaviour

Breathing heavily, Waiting anxiously, Without warning,

### It's All Relative!

Use a 'which', 'who' or 'that' relative clause to add extra information:

The Queen, who has reigned for 60 years, has four children.

Hedgehogs eat garden snails, which is important within the food chain.

The stench was so putrid that it made her eyes water.

Spelling	s I need to	know most	of these:
accommodate	correspond	hindrance	recognise
accompany	criticise	individual	recommend
according	curiosity	interfere	relevant
achieve	definite	interrupt	restaurant
aggressive	desperate	language	rhyme
amateur	determined	leisure	rhythm
ancient	develop	lightning	sacrifice
apparent	dictionary	marvellous	secretary
appreciate	embarrass	mischievous	shoulder
attached	environment	muscle	sincere
available	equip(-ped)	necessary	sincerely
average	equipment	neighbour	soldier
awkward	especially	nuisance	stomach
bargain	exaggerate	оссиру	sufficient
bruise	excellent	occur	suggest
category	existence	opportunity	symbol
committee	explanation	parliament	system
communicate	familiar	physical	temperature
community	foreign	prejudice	thorough
competition	forty	privilege	twelfth
conscience	frequently	profession	variety
conscious	government	programme	vegetable
controversy	guarantee	pronunciation	vehicle
convenience	harass	queue	yacht

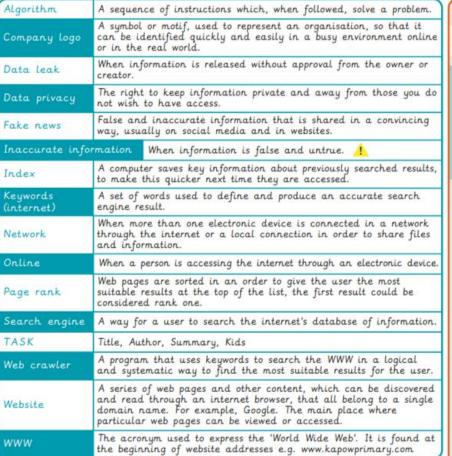
### **Expanded Noun Phrases:**

Get Descriptive! the ferocious, snarling beast inside the cage the breath-taking, scenic view beyond the valley

P	Punctuation Reminders:	
Α	Capital letters for sentences, initials and proper nouns.	
	Full stops.	
!	Exclamation marks for exclamations or surprise.	
?	Question marks.	
'	Apostrophes for possession and missing letters and to mark missing letters in contracted words, e.g. didn't.	
,	Commas in lists , and to mark parenthesis, fronted adverbials and clauses.	
	Inverted commas for speech. (Don't forget the commas too!)	
-	Hyphen to connect words togeth- er.	
-	Dashes to show longer pauses or parenthesis.	
()	Brackets for parenthesis.	

### **Knowledge Organiser-Year 5-Search Engines**

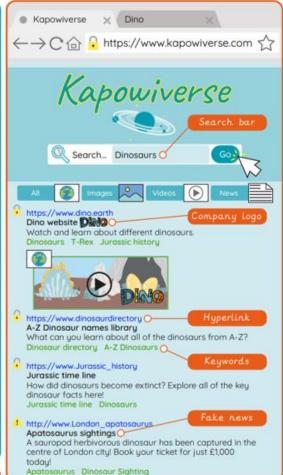
### Search engines



### Key facts







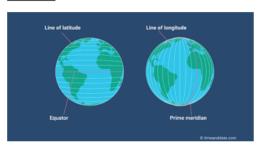
## **Geography Knowledge Organiser-Year 5-Spatial Sense**

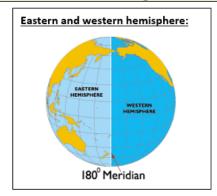


### **Key Vocabulary**

Vocabulary	Definition
prime meridian	An imaginary line that divides the earth into two sections to show the eastern and western hemispheres. It also used as the basis for world time zones.
longitude	Imaginary lines parallel to the prime meridian line that help map makers locate places with accuracy. (Vertical lines)
latitude	Imaginary lines parallel to the equator that help map makers to locate places with accuracy. (Horizontal lines)
eastern hemisphere	A term used to describe places that are east of the prime meridian line.
western hemisphere	A term used to describe places that are west of the prime meridian line.
relief maps	A map that uses shading and colours to indicate the height of the land.

### <u>Lines of longitude, latitude and the prime</u> meridian:



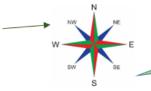


### Example of a relief map:



### Eight compass points:

North (N), North East (NE), East (E), South East (SE), South (S), South West (SW), West (W) and North West (NW)



Here are the eight compass

### Year 5 RE Knowledge Organiser: Incarnation-Was Jesus the Messiah?



### Vocabulary

Word	rd Definition	
Messiah	The term Messiah is Hebrew and means 'anointed one'. This is a title given to the person believed to be the saviour, who has been chosen to bring salvation to humankind. The term 'anointed one' is used in both Christianity and Judaism. Christians believe that the Messiah was sent by God to save humanity.	
Salvation	Salvation is the act of delivering (or keeping away) from evil or saving from sin .	
Saviour	Someone who saves something or someone from danger, harm, failure, etc. —used by Christians to refer to Jesus Christ.	
Prophecy	The foretelling or prediction of what is to come.	
Gospel	The word <i>gospel</i> comes from the Old English <i>god</i> meaning "good" and <i>spel</i> meaning "news, a story." In Christianity, the term "good news" refers to the story of Jesus Christ's birth, death, and resurrection.	
Transfiguration	A complete change of form or appearance into a more beautiful or spiritual state.	
Transformation	A marked change in form, nature, or appearance.	

#### Incarnation

The embodiment of God the Son in human flesh as Jesus Christ.





### Christian and Jewish belief in the Messiah

Christians believe Jesus is the Messiah, the "anointed one" predicted in the Jewish Scriptures. The word "Christ" comes from the Greek for "Messiah," (it is actually a title, not a surname). Jews, on the other hand, do not believe Jesus is the Messiah and are still awaiting his future arrival.





#### Knowledge Organiser-Year 5

### Within living memory...

Stephen Hawking (1942 - 2018)



Expert on black holes and structure of the universe

# Vocabulary

Tier 2: Earth, sun, moon, planet, star, solar system, rotate, seasons, shadows, position, 24 hours, daytime, night-time

Tier 3: orbit, atmosphere, scale, heliocentric, geocentric, planetary movement, axis

Disciplinary: model, identify, evidence, secondary sources, to-scale, pattern, data, measure, record, present

### Beyond living memory...

Nicolaus Copernicus (1473 - 1543)



Stated the Earth revolves around the sun

#### **Moon Phases**



The moon orbits
Earth in an oval
pattern whilst
spinning on its axis.
The sun illuminates
the Moon. The
shadow of the Earth
creates the moon's
phases.

### Earth's movement

The Earth spins on its axis and completes a full rotation every 24 hours. The Earth is constantly rotating and orbiting the Sun - which takes 365 days. As the Earth rotates, it faces towards and away from the Sun. This creates the day and night cycle.



### Food - What could be healthier?

Beef	Meat that comes from a cow.
Cross-contamination	Cross-contamination is how bacteria can spread. It happens when liquid from raw meats or germs from unclean objects touch cooked or ready-to-eat foods.
Farm	Land or water used to produce crops or raise animals for food.
Method	Following a process or list of instructions.
Packaging	The packet which holds a product safe, ready to be sold and has information on about the product.
Research	The collecting of information about a subject.
Welfare	The health and happiness of a person or animal.

### Key facts

A balanced diet consists of measured amounts of different foods to keep us healthy. Use the NHS Eatwell Guide to see how much you should eat from each food group.

The different food groups are dairy, fruits and vegetables, protein, carbohydrates, fats and sugars.

Eating the right mix of nutrients will help your body grow and develop, many foods have labels which tell you the amount of each nutrient it has.

It is important to know how to avoid cross-contamination to keep safe when preparing and cooking different foods.

In farming, it is important that the animals are cared for properly during their lifetime. There are ethical rules which ensure that the animals receive a good level of welfare.

### The Farm to Fork Process







Always ask an adult's permission before cooking in the kitchen. Remember to wear an apron and wash your hands.