



Saint Nathaniel's Academy  
Crucial Knowledge Organisers

Spring Term

Year 6

# Year 6 Maths – Spring 1

## Crucial Knowledge Organiser

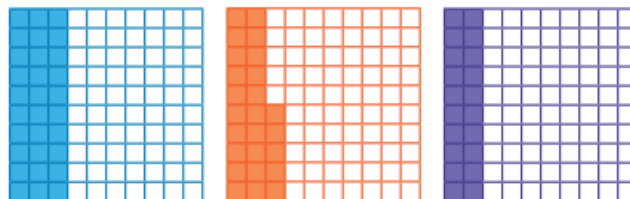
### Fractions, Decimals and Percentages

#### Key Vocabulary

- decimal place
- decimal fraction
- recurring decimal
- equivalent fraction
- tenth
- sharing
- partitioning
- exchanging
- rounding to 3d.p.
- hundredth
- thousandth
- equal to
- remainder
- grouping

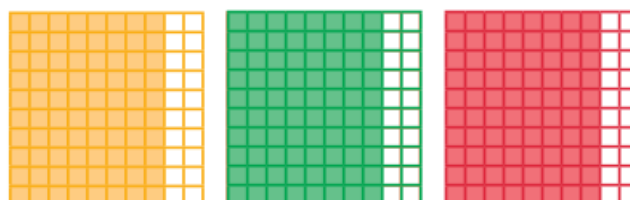
#### Order Fractions, Decimals and Percentages

$$\frac{3}{10} > 25\% > 0.2$$



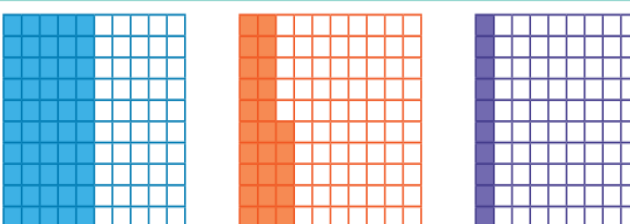
$$\frac{30}{100} = 30\% \quad \frac{25}{100} = 25\% \quad \frac{20}{100} = 20\%$$

$$80\% = 0.8 = \frac{4}{5}$$



$$\frac{80}{100} = 80\% \quad \frac{80}{100} = 80\% \quad \frac{80}{100} = 80\%$$

#### Equivalent Fractions, Decimals and Percentages



$$\frac{50}{100} = \frac{1}{2} = 0.5 = 50\% \quad \frac{25}{100} = \frac{1}{4} = 0.25 = 25\% \quad \frac{10}{100} = \frac{1}{10} = 0.1 = 10\%$$

#### Multiplying Decimals by Integers

	3	.	4	5
x				3
1	0	.	3	5
	1		1	

$$3.21 \times 3 = 9.63$$

Ones	tenths	hundredths
1 1 1	0.1 0.1	0.01
1 1 1	0.1 0.1	0.01
1 1 1	0.1 0.1	0.01

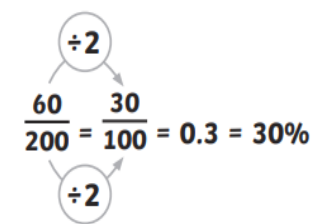
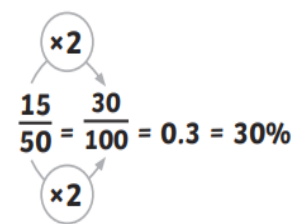
#### Multiplying and Dividing by 10, 100 and 1000

Thousands	Hundreds	Tens	Ones	tenths	hundredths	thousandths
			2	0	8	
		← × 10	0	8		
			2	0	8	

Thousands	Hundreds	Tens	Ones	tenths	hundredths	thousandths
		4	3	5		
← × 100	4	3	5			
		4	3	5		

Thousands	Hundreds	Tens	Ones	tenths	hundredths	thousandths
			1	3	5	1
← × 1000	1	3	5	1		
			1	3	5	1

#### Fractions to Percentages



# Fiction—Classic Narrative

Year 6 English —Spring 1



## Writing Outcome

To write a version of The Selfish Giant narrative in either 1st or 3rd person or from a character's point of view.

### NC Word List – Years 5 and 6

### Developing Vocabulary

ancient	hindrance	bore	hastened
awkward	interrupt	rattled	slay
community	nuisance	ceased	ogre
correspond	privilege	blossoms	trespasser
determined	rhyme	bitterly	casement
familiar	rhythm	longed	wound
forty	stomach	admired	awe
harass	vegetable	merely	

These are the writing 'keys' which we aim to use in our Y6 writing.

### 🔑 Pathways to Write keys

Gateway keys (non-negotiables/basic skills)	→ Mastery keys (year group national curriculum expectations)	Feature keys (vocabulary, manipulating sentences and tense, structure)
<ul style="list-style-type: none"> <li>Use expanded noun phrases to convey complicated information concisely</li> <li>Integrate dialogue to convey character and advance the action</li> <li>Select appropriate grammar and vocabulary</li> <li>Use brackets, dashes or commas to indicate parenthesis (Y5)</li> <li>Extend the range of sentences with more than one clause by using a wider range of conjunctions (Y4)</li> </ul>	<ul style="list-style-type: none"> <li><b>Distinguish between the language of speech and writing</b></li> <li><b>Recognise vocabulary and structures for formal speech and writing, including subjunctive forms</b></li> <li><b>Use passive verbs</b></li> <li><b>Use semi-colons to mark boundaries between independent clauses</b></li> </ul>	<ul style="list-style-type: none"> <li>Use language carefully to influence the reader's opinion of a character, place or situation</li> <li>Use archaic language</li> <li>Use paragraphs to vary pace and emphasis</li> <li>Use dialogue to explain the plot, reveal new information, show character or relationships or to convey mood</li> <li>Give clues to the reader about when the story takes place - what characters are wearing, buildings, horse drawn carriage rather than cars etc</li> </ul>

## Subjunctive

*If Will were a better footballer, he could kick the ball straight.*

## Past Progressive

*Will and his team were kicking the ball.*

*Eva was licking the lolly.*

## Present Progressive

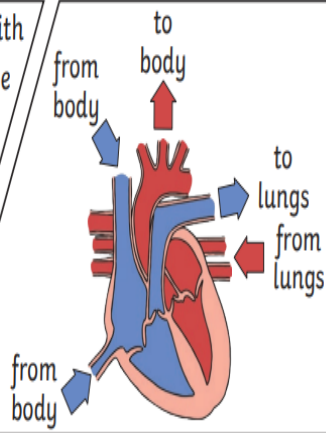
*Will and his team are kicking the ball.*

*Eva is licking the lolly.*



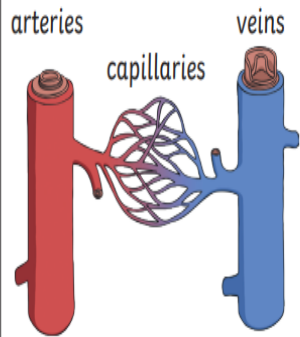


Mammals have **hearts** with four chambers. Notice how the blood that has come from the body is **deoxygenated**, and the blood that has come from the lungs is **oxygenated** again. The blood isn't actually red and blue: we just show it like that on a diagram.



Capillaries are the smallest **blood vessels** in the body and it is here that the exchange of water, nutrients, oxygen and carbon dioxide takes place.

Arteries carry **oxygenated blood** away from the **heart**.



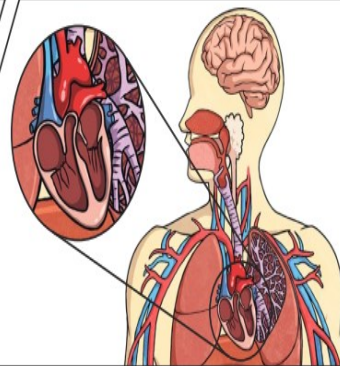
Veins carry **deoxygenated blood** toward the **heart**.

If you linked up all of the body's blood vessels, including arteries, capillaries, and veins, they would measure over 60,000 miles.

## Key Vocabulary

<b>circulatory system</b>	A system which includes the heart, veins, arteries and blood transporting substances around the body.
<b>heart</b>	An organ which constantly pumps blood around the <b>circulatory system</b> .
<b>blood vessels</b>	The tube-like structures that carry blood through the tissues and organs. Veins, arteries and capillaries are the three types of blood vessels.
<b>oxygenated blood</b>	<b>Oxygenated blood</b> has more oxygen. It is pumped from the <b>heart</b> to the rest of the body.
<b>deoxygenated blood</b>	<b>Deoxygenated blood</b> is blood where most of the oxygen has already been transferred to the rest of the body.

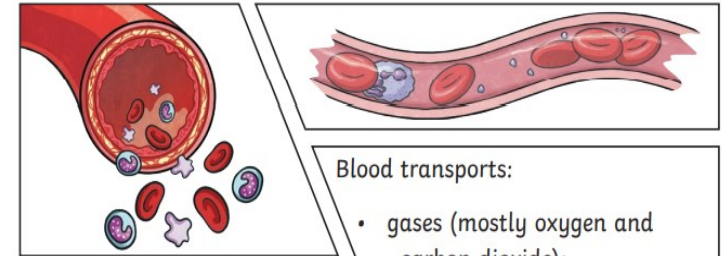
The **heart** pumps blood to the lungs to get oxygen. It then pumps this **oxygenated blood** around the body.



Regular exercise:

- strengthens muscles including the heart muscle;
- improves circulation;
- increases the amount of oxygen around the body;
- releases brain chemicals which help you feel calm and relaxed;
- helps you sleep more easily;
- strengthens bones.

It can even help to stop us from getting ill.



Blood transports:

- gases (mostly oxygen and carbon dioxide);
- **nutrients** (including water);
- waste products.

The liquid part of blood contains water and protein. This is called plasma.

Plasma is liquid. The other parts of your blood are solid.



Platelets help you stop bleeding when you get hurt.



Red blood cells carry oxygen through your body.



White blood cells fight infection when you're sick.

**Drugs**, **alcohol** and smoking have negative effects on the body.



A healthy diet involves eating the right types of **nutrients** in the right amounts.



## Key Vocabulary

<b>drug</b>	A substance containing natural or man-made chemicals that has an effect on your body when it enters your system.
<b>alcohol</b>	A <b>drug</b> produced from grains, fruits or vegetables when they are put through a process called fermentation.
<b>nutrients</b>	Substances that animals need to stay alive and healthy.

### Unit: 6.4 Blogging

#### Key Vocabulary

##### Approval

The act of acknowledging something is appropriate.

##### Archive

In this case, where older blog or vlog posts are stored.

##### Blog

A regularly updated website or web page, typically one run by an individual or small group, that is written in an informal or conversational style.

##### Blog post

A piece of writing or other item of content published on a blog.

##### Collaborate

Work jointly on an activity or project.

##### Commenting

To express an opinion or reaction in speech or writing.

##### Vlog

A personal website or social media account where a person regularly posts short videos.

#### What is a blog?

A blog is a website or webpage that is regularly updated by the author. A blog also allows the reader to post comments or opinion based on what is written.

#### What can a blog be about?

A blog can be written about any subject. You could write a blog about school such as information about the subject you are studying. Alternatively, you could write a blog about your favourite team or movie.

#### Key Learning

- To identify the purpose of writing a blog.
- To identify the features of a successful blog.
- To plan the theme and content for a blog.
- To understand how to write a blog and a blog post.
- To consider the effect upon the audience of changing the visual properties of the blog.
- To understand how to contribute to an existing blog.
- To understand how and why blog posts are approved by the teacher.
- To understand the importance of commenting on blogs.

#### Key Resources

purple  
mash



2Blog



2Connect



# Our Local Area

## Year 6 Geography – Spring 1

### Economic activity

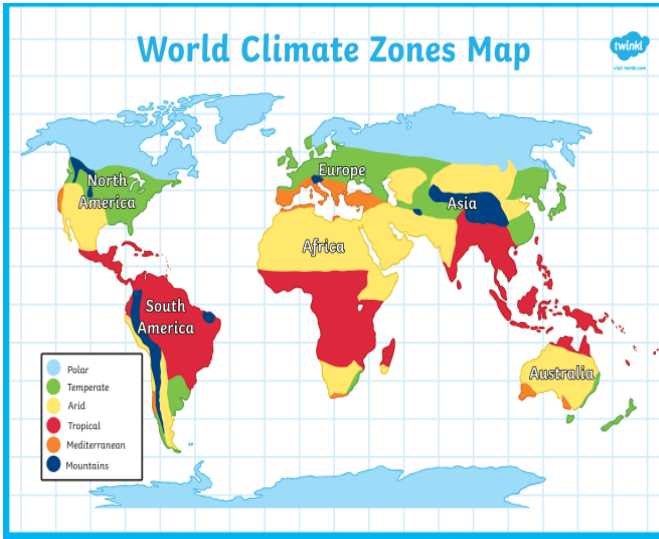
I can give examples of economic activities (The amount a country sells and makes is called economic activity. This could include: cars, electronics, clothing or food items and many more.)

I understand the differences between imports and exports (Exporting is the selling of goods and services from the home country to a foreign one. Importing is the purchasing of foreign products and bringing them into someone's home country. )

### Land Use

I can describe the differences between commercial, industrial and residential areas (Commercial—An area where the buying and selling of goods/items takes place. Industrial—An area where factories make and manufacture products e.g pottery industry. Residential—An area where homes are built and people live.)

I can explain how the land around our school is used (The land around our school is a mixture of residential areas, some industry and commercial areas and some green spaces for recreation.)



### Climate Zones

I can explain the differences between human and physical geography ( Human geography looks at the impact and behaviour of people and how they relate to the physical world. Physical geography looks at the natural processes of the Earth, such as climate and plate tectonics. )

I can children name the different climate zones ( Temperate - Mild temperatures and moderate rainfall. Tropical - Warm temperatures and lots of rain. Arid - Hot temperatures and little rain. Mountainous - Cold temperatures and precipitation often falling as snow. )

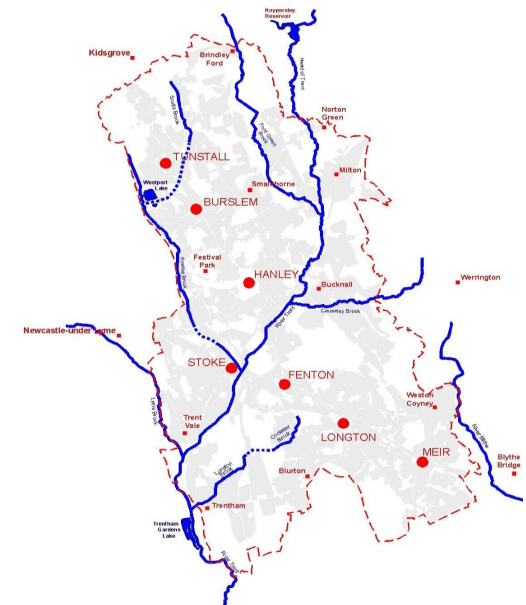
I know which climate I live in (Temperate - Mild temperatures and moderate rainfall. )

### Rivers and Upland Areas

I can explain the differences between rivers and streams (River— a moving body of water that drains the land. It flows from its source on high ground, across land, and then into another body of water. Stream— A stream is a body of water that flows on Earth's surface. The word stream is often used with river, though rivers usually describe larger streams.)

I can explain the differences between mountains and hills (Hills are lower and a lot less steep when compared to mountains.)

Can children name some upland areas in the UK (Upland areas are mostly found in the north and west of the UK e.g The Pennines and The Nowrthwest Highlands)



# Sculpting Vases

## Drawing

- I can sketch designs to build up a portfolio of ideas.
- I can include patterns and shapes in my designs.
- I can sketch vases from different viewpoints.
- I can use a range of shading techniques.



## Year 6 Art – Spring term 1



## Painting and colour

- I can make appropriate choices when decorating vases.
- I can create different effects using materials.
- I can make decorative colour and pattern choices to fit the chosen theme for my vase.

## Collage and Sculpture

- I can use slabs of clay to create a container.
- I can use the pinching technique to create a container.
- I can choose and use appropriate techniques in my clay work.
- I can choose and use appropriate tools to add details to my design.

