

Year 4 Maths Knowledge Organiser – Summer 1



Key Vocabulary
decimal
tenths
hundredths
pounds/pence
value
change
estimate
analogue
digital
duration

Round Decimals

We can **round decimals** (with one decimal place) to the nearest whole number by looking at the value of the tenths.

If the number in the tenths position is 5 or higher, we round up to the nearest whole number.

3.5 → round up... → **4**

If the number in the tenths position is 4 or lower, we round down to the nearest whole number.

3.4 → round down... → **3**

Compare and Order Decimals

We can use our place value knowledge to compare decimals with up to 2 decimal places.

9.16	>	9.08
9 ones and sixteen hundredths		9 ones and eight hundredths

We can use our understanding of comparing decimal numbers to order them in ascending or descending order.

1.50 1.53 1.86 2.00 2.09
→ (ascending order)

8.64 8.50 8.01 7.83 7.80
→ (descending order)

Writing Pence and Pounds

354p = £3.54

57p = £0.57

209p = £2.09

Rounding money to estimate

When rounding to the nearest pound, look at the tenths (the pence) to decide whether to round up or down.

£3.65

We round up because the digit is 5 or above.

So £3.65 rounds to £4.

We can use rounding to help us estimate answers to money questions. This is helpful in real life such as when you are shopping.

For example:

Eggs cost £2.35 and the bread costs £1.87.
The estimated cost =
£2.35 rounds to £2
£1.87 rounds to £2
£2 + £2 = £4.

12 hour and 24 hour clock

01:00 p.m.	13:00	07:00 p.m.	19:00
02:00 p.m.	14:00	08:00 p.m.	20:00
03:00 p.m.	15:00	09:00 p.m.	21:00
04:00 p.m.	16:00	10:00 p.m.	22:00
05:00 p.m.	17:00	11:00 p.m.	23:00
06:00 p.m.	18:00	12:00 a.m.	00:00

Days, Weeks, Months and Years

There are 7 days in a week.

There are 28 days in February, and 29 in a leap year. April, June, September and November have 30 days. All other months have 31 days.

There are 365 days in a year, and 366 in a leap year. There are 12 months in a year.

We can use this knowledge to convert between different units of time.

"I have been taking swimming lessons for 50 months."

$50 \div 12 = 4 \text{ r } 2$ so Darcey has been swimming for 4 years and 2 months.

"I have been taking swimming lessons for 3 years and 10 months."

$3 \times 12 = 36$ and $36 + 10 = 46$ so Jerry has been swimming for 46 months.

Analogue to 24 hour digital

a.m.

ten past 7 in the morning

07:10

p.m.

twenty past 9 in the evening

21:20

a.m. or p.m.

Coins and Notes

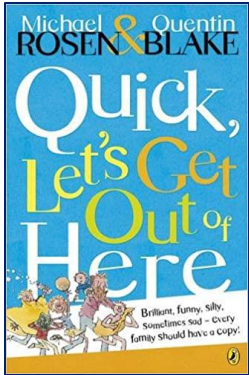
1p	2p	£1	£2	£5	£10	£20
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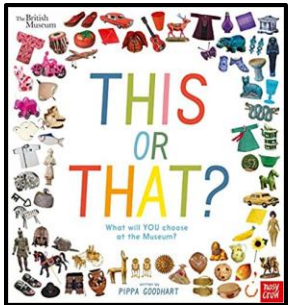
Year 4 English Knowledge Organiser – Summer 1



Core Texts



**Quick! Let's Get
of Here!**
Michael Rosen



This or That?
Pippa Goodheart

Features of a Personal Recount

Recounts are told using **past tense** verb forms.

Personal recounts allow pupils to experiment with writing to **entertain**, by story-telling events and experiences from their own lives.

A range of **sentence forms and structures** are used for different purposes and to create variety for the reader.

Time, place and cause are expressed using **adverbs, conjunctions and prepositional phrases** to create cohesion for the reader.

Dialogue -demarcated with inverted commas and the related punctuation- is included to convey different viewpoints, to entertain the reader and to demonstrate character.

Personal recounts are told from a **first-person** viewpoint using non-Standard English (e.g. *contracted words and slang*).

Thoughts, feelings and opinions, included in the re-telling of events, engage the reader and create a connection between them and the protagonist.

Vivid images are created through the use of **expanded noun phrases** (using modifying adjectives, other nouns and prepositional phrases).

The careful selection of **vocabulary** (such as precise verbs, and adverbials that tell the reader when, where or how an action took place) creates descriptive detail and contributes to the effect on the reader.

Features of a Discussion Text

The **purpose** of a discussion text (or balanced argument) is to consider a particular issue from differing viewpoints.

Discussion as a genre is highly effective in supporting pupils' critical literacy skills, developing communication and exploring ethics.

Most discussion texts are written in the **present tense**, although evidence may be presented in the past tense if the topic of discussion refers to historical events.

A **formal tone** is often used in discussion texts to express the seriousness of the issue being deliberated. Formal and **technical language** is used to match the tone and purpose.

Specific '**discussion language**' is used to signal key ideas, to sequence material and to express cause and comparison.

The title of a discussion text is often the key **question** being deliberated.

An **opening** paragraph briefly introduces the issue being discussed and draws the reader in to the text.

Material is grouped into **paragraphs** of related ideas (e.g. *one paragraph for each side of the argument*).

The main body is usually written in the **third person** (e.g. *using the pronouns he, she, they, it*). An **impersonal tone** is used, meaning that the writer avoids using language that shows any judgement or opinion on the issue being discussed.

Connections are made across the text using **conjunctions** and **adverbials**.

A **concluding paragraph** sums up the evidence and answers the title question.





Key Vocabulary

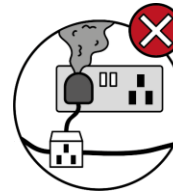
appliance	an object designed to carry out a specific task.
Complete circuit	a complete loop which allows electricity to flow, making the components in the circuit work.
Component	things we use to build our circuit, e.g. bulbs, wires, cells, batteries, switches, motors.
Conductor	an electrical conductor is a material that allows electricity to flow through it. metals such as copper and steel are good electrical conductors.
Electrical appliance	something that needs electricity to work. a kettle is an electrical appliance. it uses electricity to heat up a metal wire that then boils the water.
Insulator	an insulator is a material that does not allow electricity to flow through it. examples of insulators include wood and plastic.

What is Sound?

It is important to be safe when working with electricity.



Don't pull wires.



Don't overload sockets.



Don't use electrical appliances near water



Don't put your fingers in sockets.



Don't climb trees or fly kites near power lines.

Conductors and insulators

- Materials that let electricity pass through them easily are known as good **electrical conductors**.
- Copper, iron, steel are good electrical conductors.
- **Electrical insulators** do not allow electricity to pass through them easily. They are poor electrical conductors.
- Wood, plastic, rubber and air are good insulators.

Complete circuits



lamp



wire



buzzer



motor

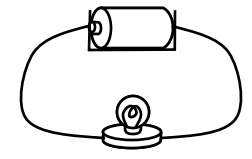


cell

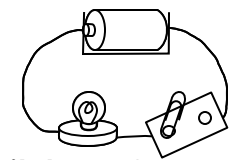
A complete circuit must have:

- at least one cell
- At least one component
- have all the **components** connected in a loop.

If any of these things are missing it is an **incomplete circuit**.



A complete circuit.



A **switch** can be used to create a break in a circuit.





Key Vocabulary

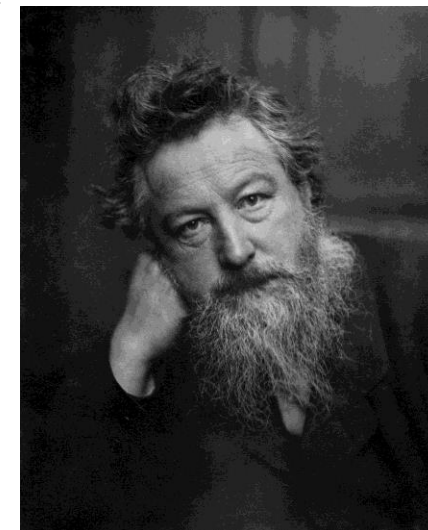
artist	a person who creates paintings or drawings as a profession or hobby.
block print	the process of printing patterns
local	relating to a particular area or one's neighbourhood
history	the study of past events, particularly in human affairs.
town	An area that is larger than a village and generally smaller than a city
Walthamstow	a large town in the London Borough of Waltham Forest, around 7½ miles northeast of Central London.
William Morris	a British textile designer, poet, artist, fantasy writer, architectural conservationist, printer, translator and socialist activist associated with the British Arts and Crafts Movement.

Biography

William Morris was one of the most influential designers of the 19th century. His work included wallpaper design, print, stained glass windows, tiles and tapestries.

He trained as an architect at Oxford University. In 1859, he married Jane Burden. They then spent 2 years decorating their home with help from their artist friends. This led to the founding of Morris, Marshall, Faulkner & Co, in 1861. Morris revived the traditions of craftsmanship as he disliked the machine process of the industrial revolution.

He tried to use natural materials in his work. In 1875, Morris started a new company called Morris & Co to take full artistic control. This was considered his most important time as a pattern designer.



Walthamstow

The London Borough of Waltham Forest was created in 1965 when the four urban district areas of Chingford, Leyton, Leytonstone, and Walthamstow merged into one.

The name of Waltham Forest derives from an institution that managed deer in south west Essex. To the east and the north of the Borough is the remainder of the former Waltham Forest.

Walthamstow is recorded in 1075 AD as Wilcumbestowe (A Place of Welcome) and in the Domesday Book of 1086 AD as Wilcumbestou. Most people would associate Walthamstow with William Morris, the Boyband E17, the High Street, or its famous Greyhound Stadium nicknamed just The Stow.

