



Rye Community Primary School

"A Gateway to learning"



Dear Parents,

Welcome back to Term 4. We hope you had a wonderful, restful break.

Term 4 Learning in Year 5

This term our topic is '**Tomorrow's World**'. In this topic, we will be exploring the ways in which both humans and technology are changing our future. There will be a focus on sustainability, climate change and looking at the people who have helped shape the modern world. We think this will be a very valuable and enriching topic for us all.

PE

Mr Sayer will take the children for P.E every Monday and Wednesday. Please ensure that your child has a **named** P.E kit.

Mathematics

In Mathematics this term, our focus will be on fractions (proper and improper) and mixed numbers. This will include comparing, ordering, adding and subtracting fractions and mixed numbers. To assist parents in the understanding of fractions and for additional help with any maths homework that is sent home with the children, a knowledge organiser is attached to this newsletter.

How you can help your child

- Look for opportunities to talk about maths in the everyday environment.
- Encourage children to explain the key maths vocabulary they have learnt during that week.
- Support with any maths homework.
- Support with learning the multiplication tables that they are working on in class (up to 12 x).
- When possible, allow your child to access Times Table Rockstars to aid their times table recall.

English

The book we are studying this term is the fantastic 'Stormbreaker', by Anthony Horowitz. We will be continuing our 'VIPERS' reading comprehension alongside our class text and a wider range of non-fiction too. Please continue to help your child by looking at the key reading skills and encouraging them to infer, predict and summarise from a text where possible.

We will begin with writing our own narrative thrillers, looking at techniques to build suspense and mystery. After this, our non-fiction unit is to take part in a debate and discussion, where the children will have the chance to compose and share their viewpoints on the environment. Finally, the term will end with the children writing their own explanation texts after they create their own periscopes!

How you can help your child

- Make sure your child reads daily. Don't forget to record reading sessions in the Reading Record booklets, especially on a **Wednesday** evening.
- Discuss meanings of any new vocabulary they come across.
- Support with any English homework and spellings that they are working on in class.

Thank you for your continued support,

Miss Brunton



application

Computer software that performs a task or set of tasks, such as word processing.

backup

An extra copy of a file or document made in case the original data is lost or corrupted.

bandwidth

The maximum data transfer rate of a network or internet connection. Bandwidth determines how much data can be sent between computers in a given amount of time. The higher the bandwidth, the speedier the signal transmission.

browser

Software that allows you to browse and view websites. Examples include Internet Explorer, Firefox and Google Chrome.

bug

A hardware or software error.

CGI

Computer-generated imagery. The process of using computers to create characters and pictures in television and film.

client

A computer that is connected to a large central computer (a server) from which it can access information.

code

A set of symbols that can be interpreted by a computer or a piece of software.

CPU

Central Processing Unit. The main internal component (brains) of the computer.

crash

An error that causes computer software or hardware to malfunction, after which the computer normally requires a restart.



cyberspace

A 'place' where humans interact over computer networks.

database

A collection of interrelated data that is organised in such a way that it can easily be accessed by a computer.

debug

To remove bugs from a computer program.

domain

A group of websites on the internet that end with the same letters, such as .co.uk or .com.

download

The transfer of information or computer programs to a computer's memory from a remote computer.

email

Electronic mail. Messages sent electronically over the internet between digital devices.

emoticon

An image made up of symbols that mimic a facial expression to express a particular emotion. For example :-) smiling :-{ frowning :-S confused

encryption

The process of transmitting coded or scrambled data so that only authorised recipients can read it.

firewall

A device or program that prevents people from using or seeing certain information while on the internet.

FTP

File Transfer Protocol. The rules for transferring files over the internet.



IP

Internet Protocol. An approved set of rules for sending and receiving data over the internet.

.....

LAN

Local Area Network. A network of connected devices that covers a specific area.

.....

network

A system of interconnected computers, people or things.

.....

offline

When a device is not switched on or connected to a network.

.....

online

When a device is switched on and connected to the network.

.....

operating system

Software that communicates with hardware to allow other programs to run.

.....

password

A secret code used to authenticate a user on a computer system.

.....

PDF

Portable Document Format. A PDF file can capture text, fonts, images and formatting from a variety of applications.

.....

pixel

Picture Element. Tiny dots used to make up the images on electronic devices.

.....

program

Software that can be used to perform a certain task on a computer.

.....

search engine

A computer program that allows you to look for and retrieve material on the web, based on the words you type into the search bar.



Rye Community Primary School

"A Gateway to learning"



There are so many ways to communicate: text messages, blogs, emails and podcasts. Which do we prefer?

During this half term, we'll interview a web designer or blogger, investigating the process their work goes through. After looking at a range of blogs and emails, we'll write a letter to our headteacher to ask if we can create a class blog. We'll learn about the history of computing, which surprisingly goes back 6000 years to the Antikythera mechanism, and find out how optical fibre cables are used. Through further exploration of modern technology, we'll learn about some of the amazing people responsible for its development. In our ICT work, we'll investigate how to decide whether a website is trustworthy and what malware is. We'll write a thriller based on exciting technology and learn about how robots can help us. We'll explore how to write an algorithm and how to keep safe online. Then, we'll listen to and download music and create a mock-up website. We'll learn all about lasers, and make periscopes and complex circuits. We'll investigate robotic toys and make our own.

At the end of the ILP, we'll create a podcast for you to listen to and we'll think about the future of technology.

ILP focus	Computing
English	Email and blogs, newspaper reports, websites, thriller narratives, podcasts
Computing	Effective and safe online research, computer networks, algorithms, using logical reasoning, downloading music, website design, 'text' language
Art & design	Logo design
D&T	Key individuals in design and technology, assistive technologies, programming, monitoring and controlling products, website header design, product design
History	History of computing
PSHE	Jobs of the future, explaining opinions
Science	Light, electricity

What will you choose to do?

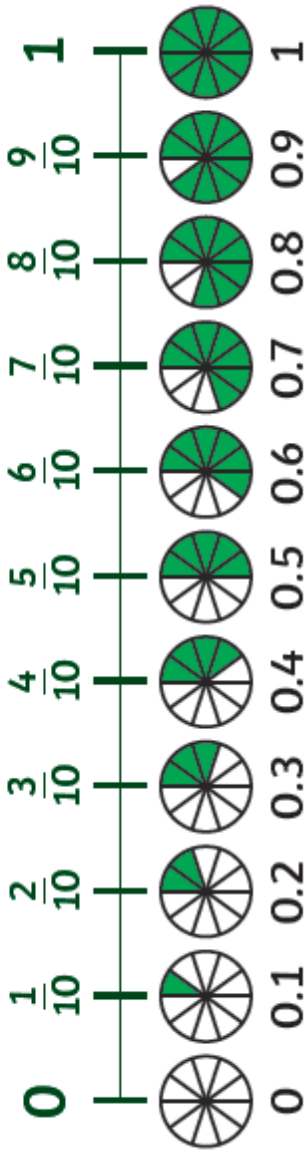
- Explain some common computing terms to a friend or family member who might not have heard of them: firewall, app, e-book, emoticon, phishing, wiki, blog and QWERTY.
- Make a list of all the computerised and robotic devices in your home. Ask a relative or friend to do the same then compare lists. Are there any similarities or differences? Present your findings using ICT.
- Write a biography about a significant figure in the computing world. Check facts by cross-referencing different sources.
- Make a digital presentation about the web and include guidance for online safety.
- Design an internet 'scavenger hunt' for your parents or carers of 10 or more things to search for using a computer. Could they do it? Give them a mark out of 10!
- Research and identify useful apps designed to help people improve their spelling or learn their times tables. Present your work as a list of hyperlinks.
- Listen to a podcast and make a note of any key facts and information. Report your findings back to the class. Would you recommend they listen to the next one?
- Survey your friends, family and classmates to find out how much time they spend online, texting or watching TV each day. Present your findings in a chart.
- Do some market research. What are the top five websites used by your family and friends? What do they like and dislike about the websites?
- Learn about different codes, such as the reverse alphabet or Morse code. Experiment by sending short messages to your friends or family members. Can they understand you?
- Write a job advert to recruit a top spy. What skills and experience would they need?
- Write a diary entry using only emoticons! Share your ideas with a friend. How well do the emoticons show what you did and how you felt?



Fractions		Knowledge Organiser	
Key Vocabulary		Comparing Fractions	
numerator	 $\frac{3}{8}$	$\frac{1}{3}$ $\frac{2}{3}$	$\frac{3}{5}$ $\frac{4}{5}$
denominator		<div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> Numerator How many equal parts of the whole are needed? </div> <div style="border: 1px solid black; padding: 5px;"> Denominator How many equal parts are in the whole? </div>	
unit fraction			
non-unit fraction			
equivalent	Equivalent Fractions		
halves	$\frac{1}{2}$ is equal to... $\frac{1}{2} = \frac{2}{4} = \frac{3}{6} = \frac{4}{8} = \frac{5}{10} = \frac{6}{12}$ 		
thirds	$\frac{1}{3}$ is equal to... $\frac{1}{3} = \frac{2}{6} = \frac{4}{12}$ 		
quarters	$\frac{1}{4}$ is equal to... $\frac{1}{4} = \frac{2}{8} = \frac{3}{12}$ 		
fifths	$\frac{1}{5}$ is equal to... $\frac{1}{5} = \frac{2}{10} = \frac{3}{15}$ 		
sixths	$\frac{1}{6}$ is equal to... $\frac{1}{6} = \frac{2}{12} = \frac{3}{18}$ 		
eighths	$\frac{1}{8}$ is equal to... $\frac{1}{8} = \frac{2}{16} = \frac{3}{24}$ 		
tenths	$\frac{1}{10}$ is equal to... $\frac{1}{10} = \frac{2}{20} = \frac{3}{30}$ 		
decimal tenths	$\frac{1}{10}$ is equal to... $\frac{1}{10} = \frac{2}{20} = \frac{3}{30}$ 		
visit twinkl.com			

Knowledge Organiser

Tenths



Fractions of Amounts

$$\frac{1}{4} \text{ of } 24 = 6$$



$$\frac{1}{3} \text{ of } 72 = 24$$

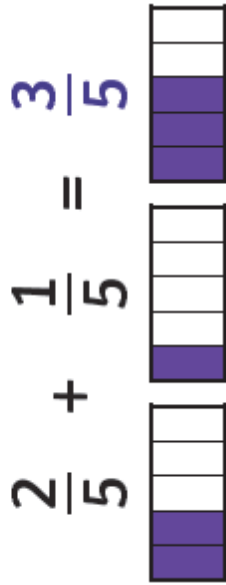


$$\frac{2}{5} \text{ of } 40 = 16$$



Fractions

Add and Subtract Fractions



Knowledge Organiser

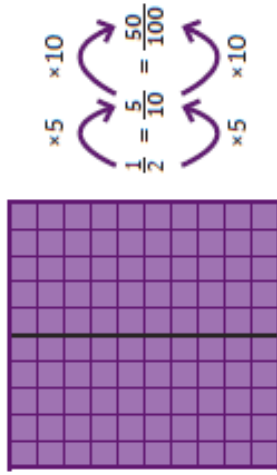
Compare and Order Fractions

We can compare and order fractions by using common denominators.



Equivalent Fractions

To find equivalent fractions, we multiply or divide the numerator and denominator by the same number.



Key Vocabulary

numerator
denominator
unit fraction
non-unit fraction
whole

Improper Fractions

An improper fraction has a numerator which is greater than or equal to the denominator.

$$5 \frac{5}{3}$$

Mixed Numbers

Mixed numbers contain a whole number and a fraction.

$$2 \frac{1}{4}$$

Convert a Mixed Number to an Improper Fraction



Convert an Improper Fraction to a Mixed Number



Adding and Subtracting Fractions

To add or subtract fractions with denominators that are multiples of the same number, we must change one fraction to have the same denominator.



Fractions

Key Vocabulary

equivalent
mixed number
improper fraction
simplest form
multiple
common denominator
common numerator



Knowledge Organiser

Subtract from a Mixed Number

$$1\frac{2}{3} - \frac{2}{6} = 1\frac{6}{6} - \frac{2}{6} = 1\frac{4}{6}$$

starting number	find the equivalent fraction	subtract

Subtract Two Mixed Numbers

$$2\frac{3}{4} - 1\frac{5}{8} = 1\frac{1}{8}$$

$2 - 1 = 1$

$\frac{3}{4} - \frac{5}{8} = \frac{1}{8}$

Subtract from a Mixed Number - Breaking the Whole

$$2\frac{1}{4} - \frac{3}{8} = 2\frac{2}{8} - \frac{3}{8} = 1\frac{10}{8} - \frac{3}{8} = 1\frac{7}{8}$$

Fractions

Add Fractions Where the Total is Greater Than 1



$$\frac{1}{2} + \frac{3}{4} = \frac{5}{8} + \frac{6}{8} = 1\frac{11}{8}$$

Add Mixed Numbers



$$1\frac{1}{4} + \frac{3}{8} = 1\frac{2}{8} + \frac{3}{8} = 1\frac{5}{8}$$

Multiply Unit Fractions by an Integer

$$\frac{1}{3} \times 5 = \frac{5}{3}$$



Multiply Non-Unit Fractions by an Integer

$$2 \times \frac{4}{9} = \frac{8}{9}$$



Multiply Mixed Numbers by Integers

Convert to an improper fraction and multiply the numerator by the integer.

$$2\frac{1}{4} \times 2$$

$$=$$

$$\frac{9}{4} \times 2$$

$$=$$

$$4\frac{2}{4}$$

$$=$$

$$4\frac{1}{2}$$



Use repeated addition.

$$2\frac{1}{4} \times 2 = 2\frac{1}{4} + 2\frac{1}{4} = 4\frac{2}{4} = 4\frac{1}{2}$$