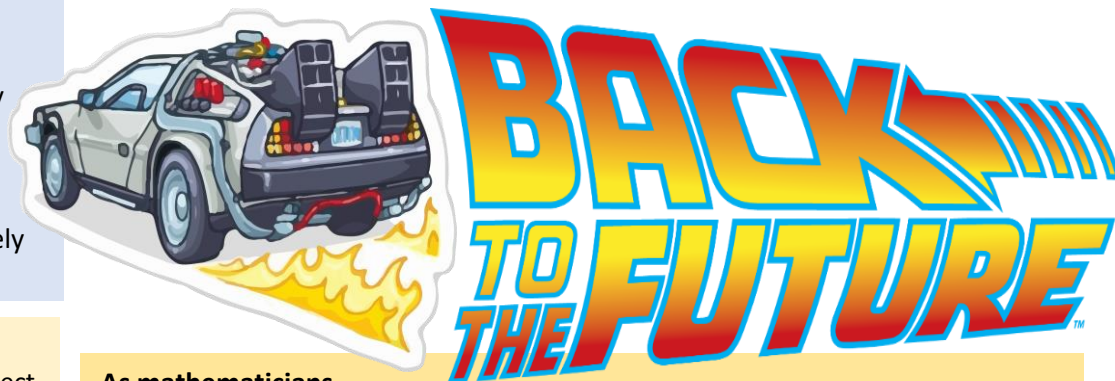


The Big Idea...

'Wait a minute, Doc, are you telling me that you built a time machine out of a DeLorean?!' When Marty McFly was pelted at 88mph back to the 1950's, he seemingly defied the laws of time and space! The famous physicist, Albert Einstein declared that 'time was not absolute'. He argued that, whilst we always thought that a second was always a second everywhere in the universe, he surmised that the rate at which time ticked depended on where you were and how fast you were travelling. If this is so, surely future holidays might include a journey back to the future...?



As STEAM students

In our spring term whole-school topic, children of all ages will acquire a broad range of subject knowledge and draw on disciplines from maths, science, technology, computing and art as we explore the lively concept and content of time travel. The children will learn how to observe and hypothesise as well as test and make as we consider methods and mechanisms used to measure time. Pendulums, sand, water and mechanisms will all be explored and built. Through the evaluation of past and present technology, children will also develop an understanding of how time has shaped daily life. Debating the possibility of travelling into the past or future will allow children to watch, read and discuss eminent opinions on what has often been referred to as the fourth dimension!

As language specialists

Time travel fiction will be at the heart of our half term. From *The Secret Lake* to the *Strangeworlds Travel Agency*, authors will teach us how to navigate portals and triggers to navigate time travel narratives. Guided reading in key stage 2 will offer children a range of different time-travel texts that will teach sentence level accuracy and grammatical precision and enable pupils of all ages to pen concise and well-structured time slip stories. From the classics (*Moondial*, *Tom's Midnight Garden* and *The Secret Lake*) to more contemporary excerpts from books like *Wonderscape* and Ross Welford's *Time Travelling* series. A key text across the school will be L.D. Lapinski's *Strangeworlds Travel Agents*. A visit from the author herself will boost our enthusiasm, as well as our writing talents! Video footage and film clips will also be included to develop an understanding of the genre. National Poetry week will encourage pupils to explore and respond to our topic through verse. Children will continue to study year group specific grammar and punctuation objectives that work towards writing mastery. Time triggers, portals and imagination will all fuel a half term full of creative tales and 'strange but true' time travel escapades.

Citizenship, British Values and Ambitious Thinking

Treating others with respect and working as a community requires tolerance, rules and consideration. Time is also very precious in a busy world. We will debate whether 'better late than never' is a good principle to live by and whether Michaelangelo was right when he said, 'there is no greater harm than that of time wasted'. We will also consider the ethics and issues of travelling through time and imagine what life might be like if we knew the future.

As mathematicians

Along with continuous maths provision, half-yearly assessments and revision, our aim during this half term is to develop our understanding of time and apply this to learning how to measure, calculate and problem solve. From clockfaces, timetables and timelines, to understanding chronology, there are lots of facts and concepts to master. I have no doubt that Captain Connection will also be on hand to test and challenge our knowledge!

In a bid to work like scientists and engineers, children across the school will show thinking, data and methodology in tables, charts and graphs.

Across the curriculum

As expressive artists

Children of all ages will be looking at how time is depicted in famous works of art. Our focus on Salvador Dali and his melting clocks will open up an understanding of conceptual art and symbolism within paintings. It will also give us chance to create and exhibit 3D pieces.

As Historians and Geographers

Children will develop an understanding of the history and chronology of clocks by timelining time! From the very first Egyptian obelisks and water clocks to pendulums and the most accurate atomic clocks of today, we will have a go at making and mapping how time has passed! Understanding man's earliest means of marking the passing of the hours using shadows and constellations will lead us on to understanding the need for a leap year... and, as luck would have it, we have one this half term!

As fitness experts all children will be involved in a planned programme of fitness, sport and wellbeing. Year 4 will start their 6 sessions of swimming. As well as enabling children to participate in team sports and festivals, Mr. Clarke will be working within lessons and with our Sports Leaders to promote field games and active play. He will also be teaching our younger children gymnastics and multi-skills.

As Musicians

We will be learning lyrics and interacting with songs and music pieces from across the decades that sing about 'time'. From the Beatles and Busted to Chopin's Minute Waltz our general knowledge and appreciation of different musical genres will grow.

As part of our Science and Maths plans this half term, 'time' will feature in many lessons. Here are the objectives from the National Curriculum for each year group which details what your child should be able to achieve at their level.

Year 1

- ♣ Children understand the vocabulary of time [for example, quicker, slower, earlier, later]
- ♣ time (hours, minutes, seconds)
- ♣ sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening]
- ♣ recognise and use language relating to dates, including days of the week, weeks, months and years
- ♣ tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.

Year 2

- ♣ compare and sequence intervals of time.
- ♣ tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times.
- ♣ know the number of minutes in an hour and the number of hours in a day.

Year 3

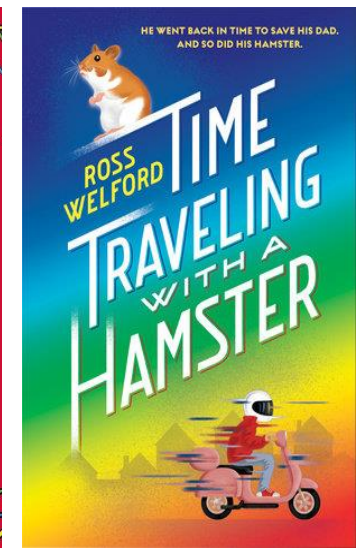
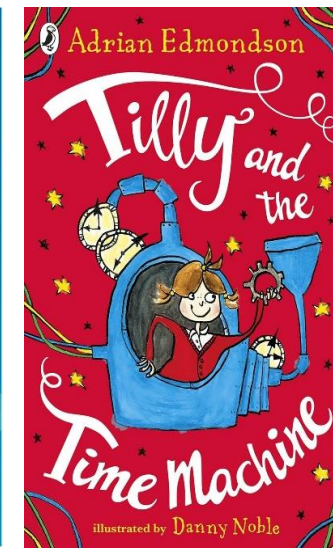
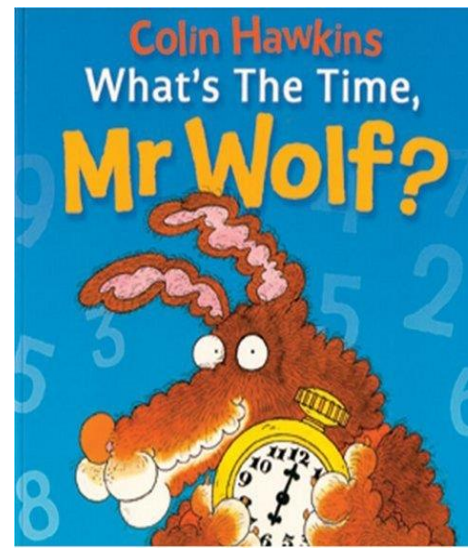
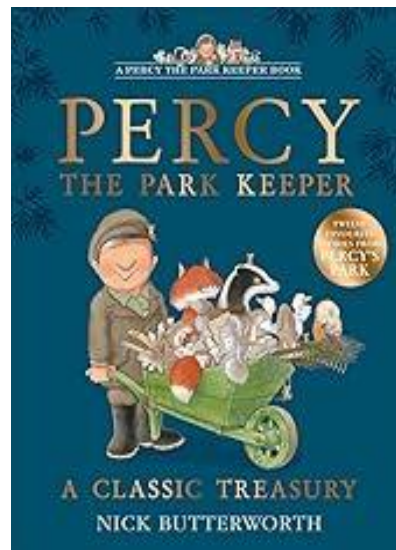
- ♣ tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks.
- ♣ estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight.
- ♣ know the number of seconds in a minute and the number of days in each month, year and leap year.
- ♣ compare durations of events [for example to calculate the time taken by particular events or tasks].

Year 4

- ♣ read, write and convert time between analogue and digital 12- and 24-hour clocks.
- ♣ solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.
- ♣ solve problems involving converting between units of time
- ♣ Pupils use all four operations in problems involving time..., including conversions (for example, days to weeks, expressing the answer as weeks and days).
- ♣ complete, read and interpret information in tables, including timetables.

Year 5 and 6

- ♣ read, write and convert time between analogue and digital 12- and 24-hour clocks.
- ♣ solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.
- ♣ solve problems involving converting between units of time
- ♣ Pupils use all four operations in problems involving time and money, including conversions (for example, days to weeks, expressing the answer as weeks and days).
- ♣ complete, read and interpret information in tables, including timetables.



Here's a selection of the books that will be included in this half term's teaching. Whether it's the fun of learning how to sequence your day with a hungry Mr. Wolf or you're watching the seasons with Percy the Park Keeper, there's lots of fiction to support our learning. Ross Welford's series of books that time travel with hamsters, tortoises and, more recently, a futuristic monkey, are full of fun for middle year readers! There are many story classics that magically transport characters through portals and into new time dimensions. *Moondial* – set at Belton House – is a great example of one of them! Tom's *Midnight Garden* now comes as a brilliant graphic novel to capture readers who enjoy reading that genre, and if you are lucky enough to have access to Amazon Prime, the latest film of the story is available to watch. *The Secret Lake* is a quick read but will have you wanting more. (Fortunately, a sequel has just been published!) There are lots of non-fiction titles to grab your attention and teach you all about time but *Just a Second* is a must for fact lovers and uses seconds, minutes, hours and years to compare the amazing things that animals can do. Our final recommendation is the brilliant series of *Strangeworlds Travel Agency*. Imagine booking a holiday where destination **and** time slips take you on new adventures! Willow Brook is proud to be hosting a visit by the author of the *Strangeworlds* books at the end of term – it's going to be (quite literally) out of this world!

