

KS4 Maths
Measure- Time

<p>Subject curriculum intent:</p>	<p>We want our pupils to be able to develop functional time skills so that they can be as independent as possible in their adulthood. Depending on the cognitive ability of the pupil, our intention is that pupils are able to manage their own time, whether this be by being able to organise and follow their own schedules (keeping them motivated and engaged throughout the day) or for them to be able to plan and attend social events out in the community.</p> <p>We want our pupils to...</p> <ol style="list-style-type: none"> 1. develop fluency in the fundamentals of mathematics so that they are efficient in using and selecting the appropriate strategies to use time skills including mental methods, underpinned by mathematical concepts 2. can solve problems by applying their mathematics to a variety of problems with increasing sophistication, including in unfamiliar contexts and to model real-life scenarios 3. can reason mathematically by following a line of enquiry and develop and present a justification, argument or proof using mathematical language. <p>In all math lessons, teachers plan engaging lessons with the aim that pupils:</p> <ul style="list-style-type: none"> • master skills in maths which they are then able to apply to a range of contexts within the school and home context • embed their new skills and understanding to a range of contexts; thus supporting application and progress in learning • acquire core mathematical skills to support their independence as they progress through the school • are able to apply their understanding; supporting them in other areas of the curriculum 	
<p>End of KS3 intent/outcome</p>	<p>End of KS4 intent/outcome</p>	<p>End of KS5 intent/outcome</p>
<p>Students will be confident when understanding days of the week and months and seasons of the year. Students will be confident when ordering daily routines and will link familiar activities to suitable times in the day. Students begin to experience using analogue clocks to read and make times.</p>	<p>Students will continue to build on their learning from key stage 3. Students will begin to experience analogue and digital times by sight. Students will also begin to develop time management skills and will link their skills developed to real life situations.</p>	<p>Students will continue to develop their time management skills and link time management to real life situations. Students will be able to independently read and make times in analogue and digital format as well as recognising 12 hour clock and 24 hour clock times, linking these times to familiar events throughout the day.</p>
<p>Intent for this topic:</p>	<p>This half term, pupils will build on their understanding and prior knowledge of time from key stage 3. Starting from their last learning point, students will order familiar activities that form part of their daily routines and will match routines and activities to suitable times of the day. Students will be able to read and make analogue and digital times. Students will be able to recognise the times shown on clocks by sight and they will be able to use clocks to make a given time. Students in KS4 will begin to develop time management skills and will begin to link time to real life situations, such as work related learning activities and recognising baking times during café activities.</p>	

Key vocabulary taught within this topic:	Order, then, next, now, after, before, clock, time, analogue, digital, hour, minutes, seconds, o'clock, quarter past, quarter to, half past, clockwise, anti-clockwise.
Links to other subjects:	-Science- Weather & Seasons -PSHCE- Daily routines -Life skills
RRSA	Article 28- I have the right to an education.

Suggested flow:

This flow is to be used as a guide. Teachers to adapt the flow to meet the needs and abilities of students within their class.

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Pre-assessment. What knowledge and skills do pupils already have?	Matching daily routines to times in the day. Ordering daily routines. Naming and ordering days/ months of the year. Ordering seasons.	Analogue time- knowing o'clock and half past and 15 minute intervals times.	Analogue time- knowing time in 5 minute intervals	Digital time- reading and making digital times.	Adding and subtracting time E.g., What is 50 minutes after 12 o'clock?
		Using and applying fractions (half & quarter) knowledge and 5 times tables knowledge.	Using and applying fractions 5 times tables knowledge.	Using and applying 5 times tables.	Using and applying 5 times tables. Problem solving.

	B2 P 5	B2 P 6-8	B2 step 1c-1b	B2Step 1b-2c	B2Step 2c-2a	B2Step 2a-3a
<u>Subject specific knowledge</u>	<u>To know</u> the word 'wait'.	<u>To know</u> key words: before, after next, today, yesterday,	<u>To know</u> the names of all days of the week	<u>To know</u> key words: 'hour, minute and second'.	<u>To know</u> the number of minutes in an hour and hours in a day	<u>To know</u> and use vocabulary: AM, PM, morning, after noon and night
What do pupils need to know?	<u>To know</u> the order of morning and night.	tomorrow, morning, afternoon and evening	<u>To know</u> Mon-Friday are week days	<u>To know</u> clocks / watches tell the time		

		<p><u>To know</u> which of the above key words links to past, present or future events.</p>	<p><u>To know</u> Saturday-Sunday and weekend dates</p> <p>Note: going from vocabulary/language they are used to in the UK</p> <p><u>To know</u> all seasons</p> <p><u>To know</u> all months in the correct order</p>	<p><u>To know</u> clocks have two 'hands' and know which represent minutes and hours</p> <p><u>To know</u> the minute hand on '12' = o'clock</p> <p><u>To know</u> the minute hand on '6' = half past</p>	<p><u>To know</u> left of the clock = past and right = to (towards the hour)</p> <p><u>To know</u> the minute hand on '3' = quarter past and '9' = quarter to</p> <p><u>To know</u> to count in 5s around the clock e.g. 1 = 5 past, 2 = 10 past - stopping at half past</p> <p><u>To know</u> to continue to use key phrased : o'clock, quarter past, half past and quarter to even when telling the time to 5 minute intervals</p>	<p><u>To know</u> o'clock = - xx:00</p> <p>To know quarter past = xx:15</p> <p>To know half past = xx:30</p> <p>To know quarter to = xx:45</p> <p><u>To know</u> the number of seconds in a minute, days in a month, days in a year inc. leap year</p>
<p><u>Subject specific skills</u></p> <p>What do pupils need to be able to do?</p>	<p>Is able to wait for an activity / turn</p> <p>Is beginning to / able to sequence event images from morning to night.</p>	<p><u>Is able to</u> sequence events in chronological order using language: before, after, next, today, yesterday, tomorrow, morning, afternoon, evening'</p> <p><u>Is able to</u> describe and compare events</p>	<p><u>Is able to</u> name days of the week in order</p> <p><u>Is able to</u> say days that come before or after another</p> <p><u>Is able to</u> identify key events for specific days</p>	<p><u>Is able to</u> read o'clock times</p> <p><u>Is able to</u> read half past times</p> <p><u>Is able to</u> read a mixture of o'clock and half past times (flicking from one to another easily)</p>	<p><u>Is able to</u> compare and sequence intervals of time</p> <p><u>Is able to</u> read and write the times for quarter past (including drawings hands on a clock)</p>	<p><u>Is able to</u> tell and write the time from an analogue clock; those with roman numerals</p> <p><u>Is able to</u> estimate and read time to the nearest minute</p>

		and activities using 'quicker, slower, earlier' vocabulary	<u>Is beginning to/ able to name months and seasons of the year in the correct order.</u> <u>Is beginning to / able to link seasons to weather and month to seasons</u>		<u>Is able to read and write the times for quarter to (including drawings hands on a clock)</u> <u>Is able to read and write the times for quarter to and quarter past (including drawings hands on a clock)</u> <u>Is able to tell and write the time to 5 minute intervals (including drawing hands on a clock)</u>	<u>Is able to compare durations of events</u> <u>Is able to connect analogue times to the digital time</u>
<u>Suggested teaching activities</u> How should I teach this?	-Playing turn taking games -Role play activities or dress up for morning and night -Sorting activity cards into morning and night	-Ordering key scenes or symbols for different activities in the day e.g. wake up, wash face, brush teeth ... -Role play activities in correct order. -P.E link - quicker and slower -Outside games - quicker and slower	-Days of the week song -Classroom displays - going through days of the week each morning -Season trays -Dress up for the weather - role play -Daily timetable display - what month is it? -Matching month cards to season displays	-Use of physical clocks to read the reading of analogue clocks. -Ensure pupils are being asked what time it is at specific points in the school day depending on what skill they are developing (o'clock, half past etc) -Give pupils jobs they need to do at specific times of the day, requiring them to read themselves to master skills -Referring to the times and clocks when cooking	Analogue to digital flash cards -Practicing 5 times tables and labelling on an analogue clock -Problem solving, adding times together inc. knowing when to take something out of the oven -Reading digital bus times -P.E lessons when exercising	

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