## **Primary Mathematics Curriculum**

## Time

Children should be given opportunities to demonstrate how the knowledge and skills gained in this strand can be used to link, reinforce and progress learning across the other four interconnected strands.

	<b>a</b> The learner	<b>b</b> The learner	<b>C</b> The learner	<b>d</b> The learner	<b>e</b> The learner	<b>f</b> The learner	<b>g</b> The learner	<b>h</b> The learner	<b>i</b> The learner	<b>j</b> The learner	<b>k</b> The learner
Elements						Time					
Understanding and Connecting	Shows an awareness of time passing. Begins to recognise the order of daily routines at home and at school.	Recognises personally meaningful times of the day and week. Identifies the present time, things that happened in the [recent and distant] past, and events that will happen in the [near and distant] future.	Demonstrates understanding of days of the week. Explores different, non-standard devices available to demonstrate time passing. Connects amount of time passing with experience.	Becomes familiar with the clock as a tool for measuring time. Demonstrates understanding that the hands of the analogue clock cover an area of space over time (For example: one full rotation of the minute hand represents an hour passing).	Recognises time in hours and half hours on analogue clocks. Recognises and identifies the time of significant daily events represented on analogue clocks. Explores the functionality of the calendar and identify dates.	Recognises the relationship between analogue and digital forms. Recognises and expresses time in half and quarter hours on analogue and digital clocks. Demonstrates understanding of am and pm.	Recognises five- minute intervals on analogue and digital clocks. Interprets simple timetables. Renames minutes as hours and hours as minutes. Explores the relationships between units of time - seconds/ minutes; minutes/hours; hours/days; days/months/ years; months/ years.	Explores the relationship between analogue and digital clocks - 12-hour / 24- hour; am / pm. Distinguishes use of the colon in expressing time digitally from the decimal point symbol). Recognises 60 as the base for performing calculations involving the addition and subtraction of time [within an hour]. Renames related units of time.	Converts flexibly between times in 12-hour and 24-hour format for a variety of purposes. Performs calculations [multiplication and division] involving hours, minutes and seconds, by holding the integral value of base 60.	Interprets timetables and schedules presented in 24-hour format.	Recognises and explores the use of other smaller and larger units of time. Identifies and explores different international time zones and calculates time differences between Ireland and other countries. Explores how time is a consideration in calculating other measures (For example: calculating speed).

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Elements						Time					
Communicating	Attends to key transitions throughout the day.	Uses or responds to simple language associated with time. Describes and sequences events in their daily routine Actively measures passing of time using non-standard measures (For example: using claps, bounces or ticks). Considers the duration of tasks (For example: tidying one's desk; eating one's lunch).	Recalls the sequence of the days of the week. Describes and represents sequences of events. Begins to recognise that there are standard universal ways of expressing time.	Uses the vocabulary of time to sequence events [first, last, next, before, after, early, late]. Begins to recognise and relate to the language of days, months and seasons. Expresses a week as seven days and vice versa. Recalls current day, month and season.	Communicates the sequence of events, days of the week, months of the year and seasons (For example: 24 hours in a day, 7 days in a week, number of days in the month). Reads and records time in one-hour and half hour intervals on analogue clocks. Makes approximations of the present time or the time shown on analogue clocks using appropriate language.	Reads and records time in one-hour, half- hour and quarter- hour intervals on analogue and digital clocks. Reads day, date and month using calendar and identifies the season. Explores different ways of presenting time using a variety of strategies (For example: using open number lines or empty clock faces).	Represents five-minute intervals on analogue and digital clocks.	Tells the time from reading an analogue and digital clock. Expresses and represents time in 12-hour and 24-hour formats.	Uses charts or graphs to represent and draw conclusions about time. Interprets and describes information provided in timetables and schedules.	Presents timetables, converting between analogue and digital time. Creates timetables and schedules for a range of purposes. Represents time on graphs and tables for meaningful purposes.	Explains how and why time zones change with references to lines of latitude.
Reasoning	Attends to a variety of routines, activities and transitions on a daily basis. Acknowledges and celebrates events of personal significance.	Recognises predictable patterns of time (For example: in daily routines). Predicts events in the immediate future based on familiar patterns of events.	Logically sequences daily and weekly events or stages in stories or real- life situations. Identifies errors in chronological sequences of events.	Identifies things that happened in the recent past and shows an understanding that things and events will happen in the future. Identifies meaningful intervals of time in daily routines.	Becomes familiar with the movements of analogue clock hands in a clockwise direction. Establishes and makes reasonable estimations of time. Investigates the fractional representation of time on an analogue clock.	Investigates and discusses calendar patterns and characteristics of months and seasons. Estimates and compares lengths of elapsed time. Matches and orders equivalent expressions of time ( For example – as represented on analogue and/ or digital clocks;, converts times where useful.	Makes and discusses approximations before engaging in numerical calculations involving time.	Translates between digital and analogue representations of time. Approximates durations of events and compares against calculations. Analyses and evaluates the ideas of other children in determining time or making. predictions of time.	Interprets and analyses timetables and schedules. Evaluates the reasonableness of predictions and numerical calculations involving time.	Explores the relationship between time, distance and speed. Performs mental calculations involving time with increasing fluency for a range of purposes.	Uses given information to calculate times in different parts of the world.

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Elements						Time					
Applying and Problem- Solving	Begins to anticipate and navigate key daily routines using supports as required.	Recognises instruments which tell the time and acknowledges time passing throughout the day. Uses visual supports to convey and understand time sequences.	Asks questions that are useful to acquire a clearer understanding of time. Analyses and sorts events according to when they occur (For example: night time vs day time activities).	Recognises special times (lunch or home time) on the clock face. Attends to sequences of events, days of the week, months of the year and seasons. Correctly sequences stages of development of an event or story.	Records time passing using a variety of devices and methods. Predicts and models how the face of an analogue clock will change over a specified time. Uses language of approximation to relate events which occur naturally throughout the day to various units of time.	Sequences time given on different time devices. Analyses and creates timetables and calendars.	Solves and completes rich practical tasks and problems involving time and dates. Approximates and measures, where possible, time taken for familiar activities or events.	Solves problems involving the addition and subtraction of units of time. Solves and completes practical tasks and problems involving time duration and timetables.	Solves and completes practical tasks and problems involving the calculation of times and dates (For example: using multiplication to predict or plan a timeline).	Solves problems involving fractional, decimal and percentage representations of time.	Uses understanding of time in the creation and planning of simulations and models.