

# DIFFERENTIATION

## Duration of Events - Calculation

Time 16

Based on your Professional Teacher Judgment and Pre-assessment data, Levels with **1** may be included in the first lesson; Based on embedded assessment data, Levels with **2** **3** may be included in these lessons. The anchor charts for this concept may look like these on a 'Wall that Teaches' over a few lessons.

T 1 Name the days of the week. Identify the day before and after. Describe events on days.

What day comes after Monday? **Monday**  
 What day comes after Tuesday? **Wednesday**  
 What day comes after Wednesday? **Thursday**  
 What day comes after Thursday? **Friday**  
 What do you do on Monday?  
 What do you do after school on Tuesday?  
 What day do we go to the library?  
 What day is sport?

T 2 Sequence events in time using ordinal numbers 1st, 2nd, 3rd...

1st 2nd 3rd  
 4th 5th 6th

T 3 Compare and describe long and short time durations.

More time	Less time
hare	tortoise
3 circles	Count to 20

T 4 Time on the hour on analog and digital clocks, describing the direction of hand movement.

T 5 Describe the duration of months, seasons, days and hours.

It takes 1 year for the Earth to revolve around the sun.  
 Seasons happen because the Earth is tilted.  
 Months: January, February, March, April, May, June, July, August, September, October, November, December.  
 Days happen because the Earth is spinning.  
 24 hours in a day.  
 The hours were created by people.

T 6 hand movement. Time to half hour on digital, analog clocks, linked to fraction 'half'.

T 7 Estimate and measure duration of time using informal units.

Let's clap and count while ... writes their name.  
 How many times did we clap?  
 Did we clap 11 times?  
 Let's record that ... could write his/her name in 11 claps.  
 Is that close to what we estimated?

T 8 Use a simple calendar to estimate and measure the number of months, weeks and days.

Can you see months on the calendar?  
 Can you see days on the calendar?  
 Let's find today on the calendar.  
 What will the date be next (Tuesday)?  
 Is going down 1 place on the calendar, adding 1 week?  
 How could we work out the number of days till (9th of November)?  
 Do you think we could find the difference between a date in one month to a date in another month on the calendar?

T 9 Experience activities that take an hour, half, quarter, one minute, few seconds.

What can you do in 1 second?  
 • Could you write your name?  
 • Could you count to 10?  
 • Could you draw a triangle?  
 • Could you do 3 push ups?  
 What can you do in 1 minute?  
 • Could you write your name two times? three times? four times?  
 • Could you count to 10? to 20? to 50?  
 • Could you draw a triangle? 2 triangles? 3 triangles?  
 • Could you run to the fence? to the fence and back again?  
 What can you do in 1 hour?  
 • Could you play a sports game?  
 • Could you watch a TV show?  
 • Could you read a book?  
 • Could you investigate a maths concept?

T 10 Tell time to quarter to and past hour analog and digital clocks, linked to fractions 'half' and 'quarter'.

T 11 Tell time to the minute on digital and analog clocks and record both.

T 12 Angles created through hand movement on an analog clock.

Embedded assessment data may tell us we need to re-explicitly teach these Levels.

T 13 Time using 'am' and 'pm'.

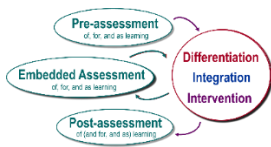
Time before midday is 'am' because in Latin 'before midday' is 'ante meridian'.  
 Time after midday is 'pm' because in Latin 'after midday' is 'post meridian'.  
 A meridian is an imaginary line on the Earth, running from the North Pole to the South Pole.

T 14 Convert between seconds, minutes, hours, days.

$\times 24$     $\times 60$     $\times 60$   
 days   hour   minute   second  
 $\div 24$     $\div 60$     $\div 60$

T 15 Read and interpret simple calendars, timetables and timelines.

Vertical number patterns: 6, 13, 20, 27  
 Diagonal number patterns: 5, 13, 21, 29; 4, 10, 16, 22, 28



T 16 Measure, calculate duration using stop watch + calculate duration using start and finish time.

12:00 till 12:24 = 24 minutes  
 14 minutes to 3 till 12 minutes past 3  
 14 minutes + 12 minutes = 26 minutes  
 12 minutes past 3 till 12 minutes to 4  
 18 minutes + 18 minutes = 36 minutes

T 17 Convert between 12 and 24 hour time.

4:00 pm is 4 hour after midday.  
 Midday is 12:00  
 4:00 + 12:00 = 16:00  
 Can we convert from 12 hour time to 24 hour time by adding the 12 hours before midday?

T 18 Construct and interpret timelines using scale judgement.

Scale 1 year

2015 Started School 2 February 2015  
 2014  
 2013  
 2012 Started Day Care 28 January 2011  
 2011  
 2010 Born 29 November 2009  
 2009

T 19 Read and interpret simple timetables to plan trips and daily.

What time does the train leave Central?  
 Does the train stop at Strathfield?  
 What time does the train arrive at Strathfield?  
 How long did the train take to go from Central to Strathfield?  
 Does the train take 13 minutes to travel from Central to Strathfield?  
 Does the train stop at West Ryde?  
 What time does the train arrive at Newcastle?  
 Does the train arrive at Newcastle at 1:58 pm?  
 How long does the train take to travel from Central to Newcastle?