

# TIME AND TEMPERATURE

## MNU 310-a

Using simple time periods, I can work out how long a journey will take, the speed traveled at or distance covered, using my knowledge of the link between time, speed and distance.

### Pupils should be able to:

- Use a calendar
- Understand and convert between am/pm and 24 hour notation
- Convert between minutes and hours/minutes  
e.g. 100 mins = 1h 40min
- Convert between minutes and fractions or decimals of an hour  
e.g. 15 mins =  $\frac{1}{4}$  h = 0.25 h
- Be able to use a timetable, mentally if possible
- Record elapsed time, if possible using a stopwatch  
in seconds and in hundredths of a second
- Calculate speed, distance, time - simple examples only
- Use positive and negative numbers descriptively and make simple calculations with the aid of a number line

PUPILS SHOULD COMPLETE THE FOLLOWING EXERCISE AND ASSESS THEIR PROGRESS BY TICKING ONE OF THE OPTIONS FOR EACH TOPIC IN THE TABLE BELOW

	DEVELOPING	CONSOLIDATING	SECURE
Use a calendar Q1			
Convert am/pm to 24hr and hours/minutes (QUESTIONS 2-5)			
Use a timetable, find time, distance, speed (QUESTIONS 6-7)			
Use positive and negative numbers (QUESTIONS 8-9)			

mymaths lessons: library/number/counting and place value/ negative numbers 1 & 2

Number Line tool: library/number/counting and place value/number line

Library/shape/measures/time and timetables

/time calculations

/speed

SELF EVALUATION EXERCISEDATE DUE \_\_\_\_\_

1. How many days are there between 5<sup>th</sup> March and 5<sup>th</sup> April including both days?  
(Remember March has 31days)
2. Write 4.30pm in 24 hour format.
3. Write 2015 in am/pm format.
4. Convert 135 minutes to hours & minutes.
5. Write 2.5 hours as a time in hours and minutes.
  
6. Using the following bus timetable for the X60 Stagecoach service:

Departing from	Departure times		
Leven Bus Station	0700	0900	1000
Upper Largo	0711	0911	1011
Elie	0721	0921	1021
St. Monans	0726	0926	1026
Pittenweem	0731	0931	1031
Anstruther Coop	0743	0943	1043
Dunino	0751	0951	1051
St.Andrew's Bus Station	0802	1002	1102

- (a) How long does it take to travel from Elie to St.Andrews?
  - (b) Which villages are 5 minutes apart by bus?
  - (c) Which part of the bus route takes the longest time? How long?
  - (d) Which part of the bus route takes the second longest time? How long?
  - (e) What is the difference between these two times?
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7. (a) Calculate the average speed of a lorry which travels 160 miles in 4 hours.  
(b) Calculate the distance traveled at 20km/hour for two and a half hours.
  
  8. A thermometer reading is -2 degrees at night and +6 degrees during the day. What is the difference in temperature?
  
  9. If the night temperature in December falls by 8 degrees from a day-time temperature of 5 degrees, find the night temperature.