## YR5 Knowledge Organiser - Time

## Key Concepts

- Solve problems involving converting between units of time


## Key Vocabulary

- year
- month
- week
- day
- hour
- minute
- second
- convert / units
- difference
- timetable


## Convert Units of Time

There are 12 months in a year. We can use this knowledge to convert between and compare the different units of time.

"I am 98 months old and my brother is 6 years and 11 months old."

To find out who is older, we could work out Asha's age in years and months.

$$
98 \div 12=8 r 2 \text { so Asha is } 8 \text { years and }
$$

2 months old. She is older than her brother.

Another method would be to convert her brother's age into months.
$6 \times 12=72$ and $72+11=83$ so Asha's brother
is 83 months old. He is younger than Asha.

There are 7 days in a week. We can use this knowledge to convert between and compare the different units of time.

| 6 weeks and |  | 59 days |
| :---: | :---: | :---: |
| 6 days |  | $59 \div 7=8 r 3$ |
| $6 \times 7=42$ | $<$ | 8 weeks and |
| $42+6=48$ | 3 days |  |

There are 60 minutes in an hour, not 100, so we need to be careful when converting 'parts' of hours.
"Three quarters of an hour is equivalent to 0.75 hours,. However, this is equivalent to 45 minutes, not 75 minutes.

## Timetables

We use timetables to retrieve information. We can use 'counting on' to work out the duration of events. As we do not read time as a decimal, we cannot use column addition to find the difference between times

Manchester Coach Station Timetable

| Destination | Departure | Arrival |
| :---: | :---: | :---: |
| Sunderland | $06: 54$ | $09: 40$ |
| Cornwall | $07: 28$ | $13: 02$ |
| Morecambe | $08: 19$ | $09: 42$ |
| Oxford | $09: 36$ | $12: 22$ |

Number lines help us to count on to find durations. E.g. The journey from Manchester to Sunderland takes 2 hours and 46 minutes.


Now, we can compare the different durations.
"The journeys to Sunderland and Oxford last the same amount of time. The journey to Cornwall is 4 hours and 11 minutes longer than the journey to Morecambe."


