

Lesson Plan

Units of time

This list below shows the units we use to measure time.

It also shows the conversion from one unit to another.

60 seconds = **1** minute

60 minutes = **1** hour

24 hours = **1** day

7 days = **1** week

365 days = **1** year (**366** days in a leap year)

Question

- a) How many minutes are there in 8 hours?
- b) How many hours are there in two weeks?
- c) How many weeks make up 74 days?

12-hour and 24-hour clock

Time is measured using either the **12-hour clock** or the **24-hour clock**.

12-hour clock

The **12**-hour clock notation uses **am** and **pm** to indicate morning and afternoon.

- **am** is the time from **12**midnight and before **12**noon (**12.00pm** is midday)
- **pm** is the time from **12**midday and before **12**midnight (**12.00am** is midnight)

For example

- **6.23am**
- **7.45pm**

24-hour clock

The **24**-hour clock does not require the use of am or pm. Afternoon is indicated by a number bigger than **12**.

When converting from the 12-hour clock to the 24-hour clock remember: for any time after 12.59pm, add 12 to the hours.

For example

- $6.23pm$ becomes $(6.23 + 12) = 18:23$
- $7.45pm$ becomes $(7.45 + 12) = 19:45$

The **24**-hour clock always uses **4 digits**, so for any time before **10:00** a zero is placed at the beginning.

For example

- $01:00$ means $1.00am$
- $13:00$ means $1.00pm$
- $04:00$ means $4.00am$
- $16:00$ means $4.00pm$

- **Days, months and years**

- Use this rhyme to help you remember how many days there are in each month:
 - **30** days has September,
 - April, June and November.
 - All the rest have **31**,
 - Except February alone,
 - Which has **28** days clear,
 - And **29** in each leap year.

- **Question**

- If March **28th** is a Tuesday, what day is the April **6th** in the same year?
- Reveal answer
- There are **31** days in March.

Tues	Weds	Thurs	Fri	Sat	Sun	Mon
28	29	30	31	1	2	3
4	5	6				

- By counting through the days you can see that **6th** April will be a Thursday.

- Leap years
- There are **365** days in a year. A leap year, with its **extra** day in February, has **366**. Leap years occur every **four** years, and are divisible by **4**. This remains true, except for every year that is divisible by **100**, however it will still be a leap year if the year is divisible by **400**.
- **For example:**
 - 1996 was a leap year because $1996 \div 4 = 499$
 - 1934 was not a leap year because $1934 \div 4 = 483.5$
 - **1700** wasn't a leap year, because although it is divisible by **4** ($1700 \div 4 = 425$), it is also divisible by **100** ($1700 \div 100 = 17$). However it isn't divisible by **400** ($1700 \div 400 = 4.25$).
 - **2000** was a leap year as it is divisible by **4**, **100** and also by **400** ($2000 \div 400 = 5$).

Power point Example