

Measurement

Calendar

Useful rhyme

30 days has September, April,
June and November
all the rest have 31 but leap
year coming once in four
gives February one day more

Point Feb normally has 28
days

Leap Years

A year is a leap year if it
is divisible (evenly) by 4

eg 2016 - leap year
2015 - Not leap year

If a year is divisible by 100
it is only a leap year if it is
divisible by 400

eg 2100 - Not leap year

there are 365 days in a
year

There are 52 weeks in a year

There are 12 months in a year
and 4 weeks in a month

24 hour clock time

With 24 hour clock time there
is no am or pm is
used.

We do not use a colon (:)
but we do use 4 digits.
24 hour clock time gives
us the number of
hours since midnight

12 midnight is 0000

12 midday is 1200

Examples

1) Write 5:20 pm in
24 hour time

Answer Since pm,
add 12,

1720

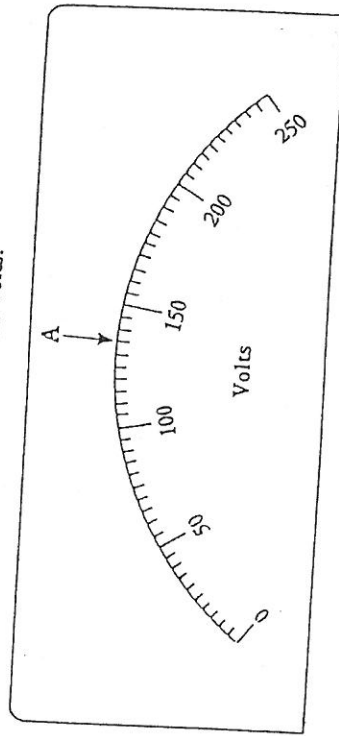
2) Write 1059 in
am/pm time

Answer less than 1200
so am time 10:59 am

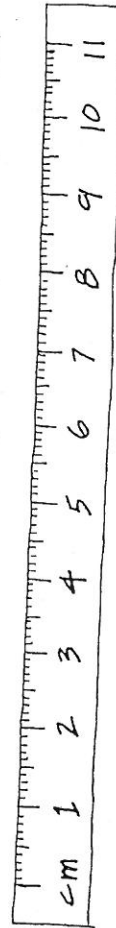
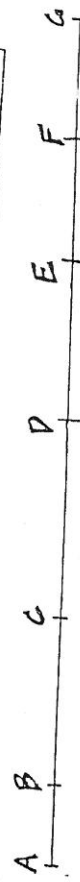
READING SCALES

On some scales each division represents 1 unit. On some, each division represents 2 units or 5 units or 10 units etc.

Example Each large division represents 50 volts. There are 10 small divisions between each large one. Each small division represents 5 volts. The pointer A is at $100 + 5 \times 7 = 135$ volts.



Example



LENGTH OF $\overline{AB} = 10$ mm

LENGTH OF $\overline{CD} = 26$ mm ($58 - 32 = 26$)

measurement units

the S.I. system is used in N.Z. It is the metric system. Some important units of measurement

Length	Mass	Volume
metre (m)	Gram (g)	Litre (l)
centimetre (cm)	milligram (mg)	millilitre (ml)
millimetre (mm)	kilogram (kg)	cubic centimetre (cm ³)
kilometre (km)	tonne (t)	cubic metre (m ³)

Prefixes commonly used

Kilo means 1000
Cent means $\frac{1}{100}$
milli means $\frac{1}{1000}$

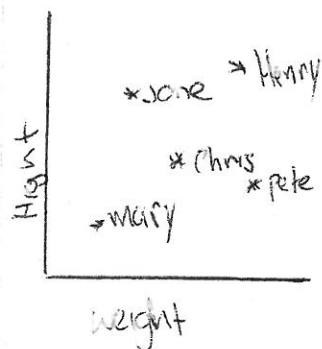
Conversions of length

1 m = 100 cm
1 m = 1000 mm
1 cm = 10 mm
1 km = 1000 m

Graphs

Interpreting Graphs

Look at the graph below of weight v Height



I notice that

* Jane & Chris are the same weight but Jane is taller

* Chris and Pete are the same height, but Pete weighs more

* Henry is the tallest and weighs the most

* Mary is the shortest and weighs the least

Plotting co-ordinates

Both axes have numbers
the flat or horizontal
axis, is the x axis

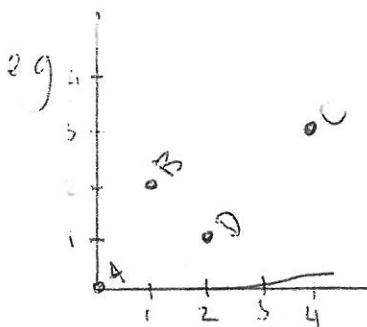
The up and down or vertical
axis is the y axis

A co-ordinate is a pair
of numbers

eg $(4, 3)$

x value y value

To plot, go along first, then
up



$A(0, 0)$
 $B(1, 2)$
 $C(4, 3)$
 $D(2, 1)$