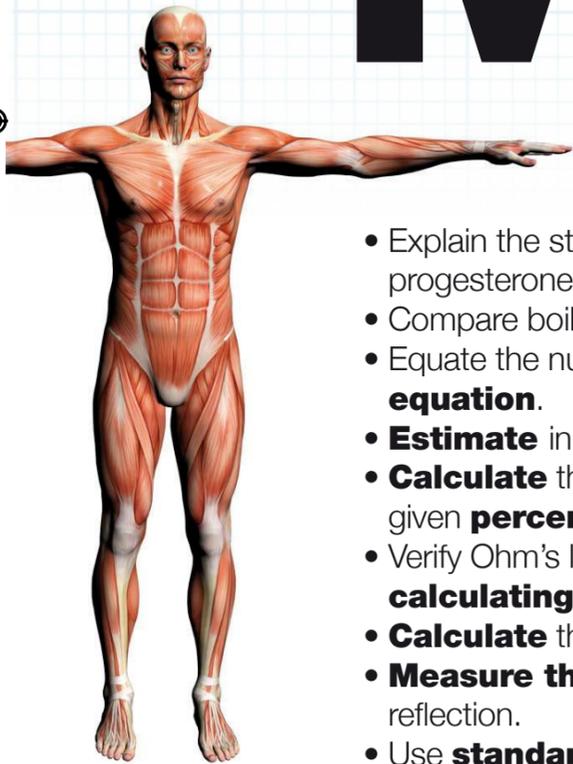


# WHEN WILL I EVER NEED MATHS?



Well, you might have to use it in Science...

- Explain the stages of the menstrual cycle by referring to a **graph** of oestrogen and progesterone levels.
- Compare boiling points of gases using your knowledge of **negative numbers**.
- Equate the numbers of atoms of each element when you **balance a chemical equation**.
- **Estimate** in **kilograms** the amount of household waste that a family produces.
- **Calculate** the number of units of alcohol in a certain **volume** of alcoholic drink with a given **percentage** of alcohol.
- Verify Ohm's law by **plotting a graph** of current against voltage and then **calculating** the **gradient**.
- **Calculate** the efficiency of an energy change and give this as a **percentage**.
- **Measure the angle** of incidence for a ray of light to investigate total internal reflection.
- Use **standard form** when comparing the **masses** of the planets in the solar system.
- **Measure accurately** when recording the **heights** of seedlings.
- **Rearrange formulae** to change the subject and then **substitute** in known values.
- **Convert** between **metric** units of **length** or **volume**.

1	H						
2	He						
3	Li	4	Be				
5	B	6	C	7	N	8	O
9	F	10	Ne				
11	Na	12	Mg				
13	Al	14	Si	15	P	16	S
17	Cl	18	Ar				
19	K	20	Ca	21	Sc	22	Ti
23	V	24	Cr	25	Mn	26	Fe
27	Co	28	Ni	29	Cu	30	Zn
31	Ga	32	Ge	33	As	34	Se
35	Br	36	Kr				
37	Rb	38	Sr	39	Y	40	Zr
41	Nb	42	Mo	43	Tc	44	Ru
45	Rh	46	Pd	47	Ag	48	Cd
49	In	50	Sn	51	Sb	52	Te
53	I	54	Xe				
55	Cs	56	Ba	57	La	58	Ce
61	Pr	62	Nd	63	Pm	64	Sm
65	Eu	66	Gd	67	Tb	68	Dy
69	Tm	70	Yb	71	Lu	72	Hf
74	Ta	75	W	76	Re	77	Os
79	Au	80	Hg	81	Tl	82	Pb
83	Bi	84	Po	85	At	86	Rn
87	Fr	88	Ra	89	Ac	90	Th
91	Pa	92	U	93	Np	94	Pu
95	Am	96	Cm	97	Bk	98	Cf
101	Lr	102	Rf	103	Db	104	Sg
105	Uu	106	Uub	107	Uut	108	Uuq
109	Uuh	110	Uuq	111	Uuq	112	Uuq

Maths has lots of applications and is a vital asset in many degrees and careers.  
To find out more about where maths is used and maths-related careers visit:  
[www.mathscareers.org.uk](http://www.mathscareers.org.uk)