

WESTGATE SCIENCE CLUB

issue 13

FEBRUARY 2012



making science cool

THE NIGHT SKY LOOKING SOUTH (early evening)

The grandest constellation ORION—Check out the 3 stars in a row—Orion's Belt. The 3 stars point lower down to **SIRIUS**—the brightest of stars in the night sky.



A clear sky, a pair of binoculars, a small telescope and observe here and you will be looking at the **ORION NEBULA (M42)**. It is the closest **NEBULA** to us on earth at 1344 light years away. It is a star forming region of the sky. It will appear as a 'fuzz'.

Through a large telescope

The star **BETELGEUSE** is reddish in colour

The star **BELLATRIX** is bluish

The 3 stars in **Orion's Belt** point to the brightest star in the night sky

SIRIUS



SCIENCE PUZZLE

E	Y	G	S	I	E	N	E	O	T	C	L	L
O	R	T	E	N	C	N	L	V	I	A	L	E
W	E	T	B	S	O	N	E	R	I	W	T	C
S	W	C	L	U	B	R	C	R	Y	L	H	N
L	O	E	N	L	S	U	T	L	G	E	G	E
O	P	V	S	A	I	W	R	C	M	Y	I	I
B	I	I	T	T	T	E	I	I	E	N	L	C
R	C	T	A	O	G	S	C	T	E	L	U	S
3	T	I	T	R	E	A	I	U	C	R	E	P
A	S	S	I	V	L	A	T	S	R	H	A	A
R	M	O	C	R	O	R	Y	E	E	A	R	R
U	3	P	P	M	A	L	N	L	A	R	T	K
T	C	E	L	L	W	T	T	T	C	I	H	M

WESTGATE SCIENCE CLUB ELECTRICITY
 PP3 AA AAA CELL POWER
 CHEMICAL ENERGY ELECTRONS
 ENERGY LIGHT LAMP CIRCUIT
 SWITCH RESISTANCE VOLT AMP
 INSULATOR CURRENT WIRE LIVE NEUTRAL
 EARTH STATIC SPARK POSITIVE

Young Faith with the boss helping with the DRY ICE experiment Jan 2012



Joel & Mike with an experiment using Magnesium Ribbon Jan 2012



3

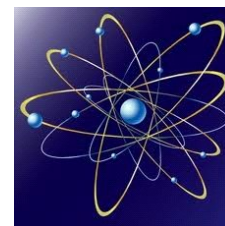
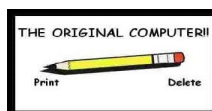
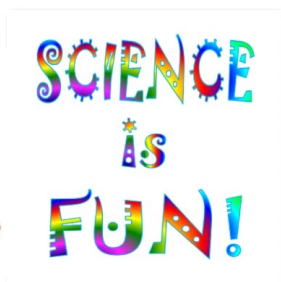
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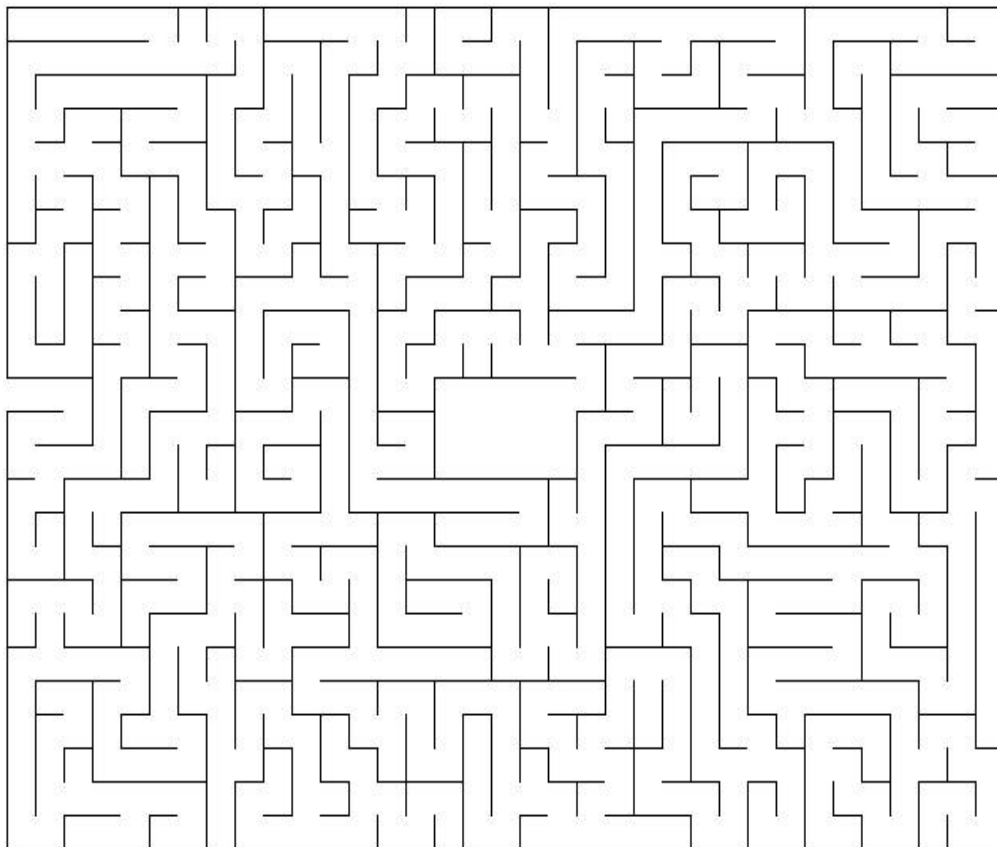
A - gases, B - steam, C barometer

CAN YOU MATCH CORRECTLY:

- A Population of Exeter
- B Average distance Earth to Moon in km
- C Distance as the crow flies London to New York in km
- D Length of River Nile in km
- E Time in minutes for light from sun to reach earth

- 1 8.33
- 2 6,570
- 3 384,000
- 4 120,000
- 5 5,575





FILL IN THE MISSING WORD...

1. Solids, liquids and(5 letters)
2. Ice, water and (5 letters)
3. Air pressure is measured using a (9 letters)
(answers somewhere in this booklet)

SOUND

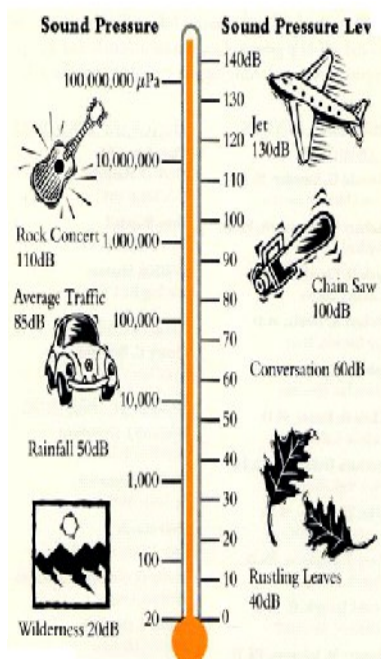
Is measured in
dB



The loudness, or intensity, of a sound is measured in units called **decibels (dB)**.

They are named after A G Bell who invented the telephone.

Vibrations made by quiet sounds make only tiny changes in air pressure. You are able to hear them because your ears are very sensitive, and can pick them up.



WESTGATE SCIENCE CLUB

For dates, times & other events see website

The Science Club is held at the Westgate Church Building
(opposite The Picture House),
Bartholomew Street West, Exeter - EX4 3AJ

phone Mike Coles Exeter 253064
Naomi Patkai Exeter 466251
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Spring 2012 dates - Fridays -

13 January, 10 February, 9 March

For further detail see website



Making Science Cool
for Primary School
Children aged 7 yrs

History...

See what experiments we did on previous club evenings.

at www.westgatescienceclub.org.uk
Slide show and photos on the 'contacts' page

TEMPERATURE

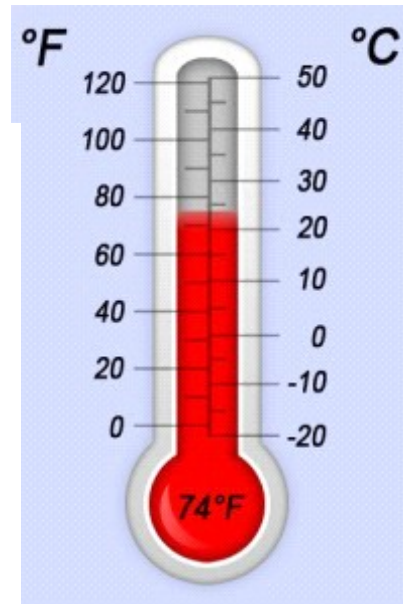
+ 37.5 C = Human Body

Minus - 78.5 C = Dry Ice sublimes

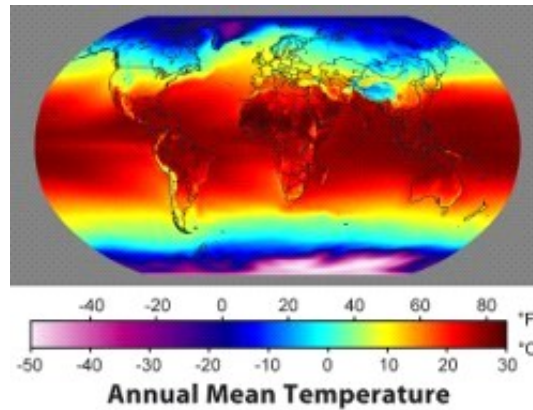
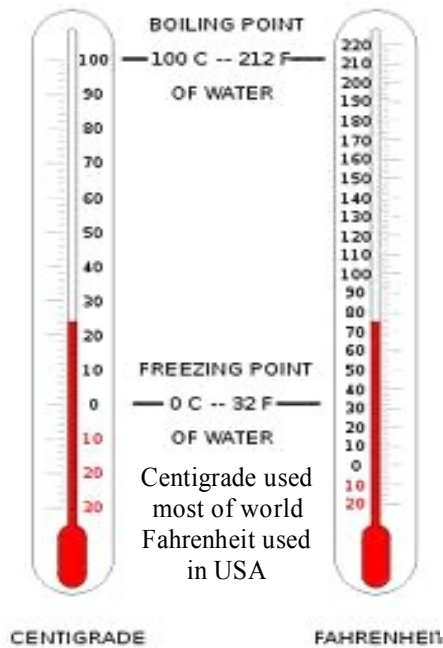
A few Thousand degrees C
= Magnesium Ribbon burns

+ 100 C = Water Boils

0 C = Water freezes



Anders Celsius (1701-1744) was Swedish astronomer credited with the invention of the centigrade scale in 1742. Celsius chose the melting point of ice and the boiling point of water as his two reference temperatures to provide for a simple and consistent method of thermometer calibration.



www.westgatescienceclub.org.uk