



making science cool

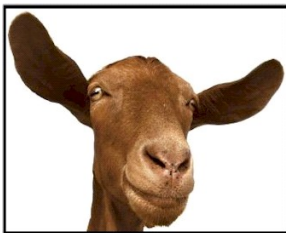
Your Ears.

Did you hear something ?
Maybe you heard a lorry in the distance or an ambulance siren or the sound of turning on a light switch.

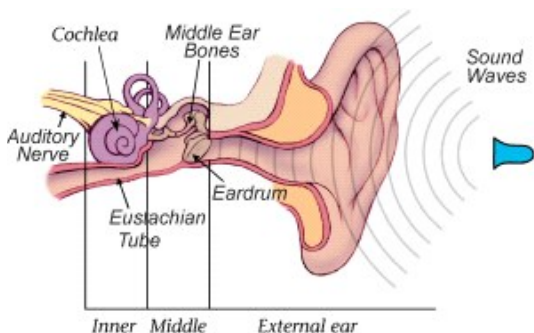


Sounds are everywhere. Your ears are made up of three different sections.

The outer ear...this part people can see, it's main job is to collect sounds, from whispers to a barking dog. It also includes the ear canal, where wax is produced. Earwax (gross stuff!) contains chemicals that fight off infections that could hurt the skin inside the canal. It also collects dirt to help keep the ear canal clean, So earwax isn't just gross, It's gross and useful!



Anyone have a pair of ear muffs my size?



The Middle Ear's main job is to turn sound waves received into vibrations that are delivered to the inner ear. To do this it uses an eardrum, which is a thin piece of skin stretched tight like a drum.

The Inner Ear - Sound arrives here from the Middle ear, the sounds are converted to nerve signals that the brain understands as sound. The brain puts it altogether and you listen to your favourite music!.

The smallest bone - *stapes or stirrup bone*, and the smallest muscle - *stapedius* - lies in your ears.

Ears do more apart from hearing, do they:

- A - help you keep clean
- B - help you feel warmth
- C - help you balance
- D - help you keep colds clear

Check the answers on the Astronomy page at www.westgatescienceclub.org.uk

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WESTGATE SCIENCE CLUB PUZZLE

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

WESTGATE CLUB EXETER SCIENCE TEST

TUBE SATURATED SALT OIL WATER

BATTERY MICROWAVE SOAP GALAXY STARS

HOT COLD OXYGEN CHEMICAL WARM

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February Club

We discovered that oil and water don't mix.

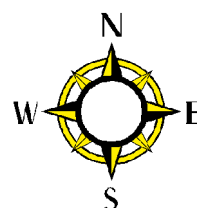
Proving there is 'low air pressure' in a fast flowing air column.

High air pressure on the outside of the column keeps the ping pong balls steady



How many degrees circle the compass ?

- A - 360
- B - 180
- C - 90
- D - 240



Check the answers on the Astronomy Page at www.westgatescienceclub.org.uk

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challenge yourself and your friends

1. What is special about daylight and night time on 21st March, Which are correct?

- A - The Sun rises in the south and sets in the north
- B - The sun rises due east and sets due west
- C - Daylight and night time are the same ~ ie 12 hours each.

2. What is so special about the temperature of 16C and 28C when thinking about temperature measurement in Centigrade and Fahrenheit?

- 3. What is a 'prevailing wind' ?
- A - A wind that does not stop blowing
- B - A wind that generally blows from one direction
- C - A wind that is always near freezing
- D - A wind that is accompanied by rain.

4. At what temperature does water boil?

- A 32C B 60C C 100C D 212C

5. How fast does sound travel through air?

- A 343 metres per second
- B 443 metres per second
- C 243 metres per second

6. What is 'zenith' ?

- A - The name of a person in Star Trek
- B - The description of the horizon
- C - The area of sky looking straight up

Check answers on above on the ASTRONOMY PAGE at

www.westgatescienceclub.org.uk

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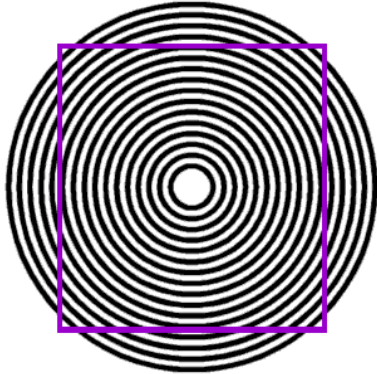
MAGIC NUMBERS

What's so special about this magic square ?

8	1	6
3	5	7
4	9	2

Eye Tricks

Does the square have curved sides ?



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see answers on ASTRONOMY PAGE at www.westgatescienceclub.org.uk

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
e mail westgatescienceclub@gmail.com

Spring 2011 dates

Fridays - 14th January, 18th February
11th March, 8th April



Making Science
Cool
for Primary School
Children
aged 7 yrs +

View slide show of our Opening in September 2010.
See what experiments we did on other club evenings.

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

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On a clear night have a look outside at The Moon. On the 12th March it should look like this. Approx 238,000 miles from the earth.

What causes part the moon to be lit up?

The moon is illuminated because it reflects the light from the sun. The part of the moon facing the sun is lit up. The part facing away from the sun is in darkness.

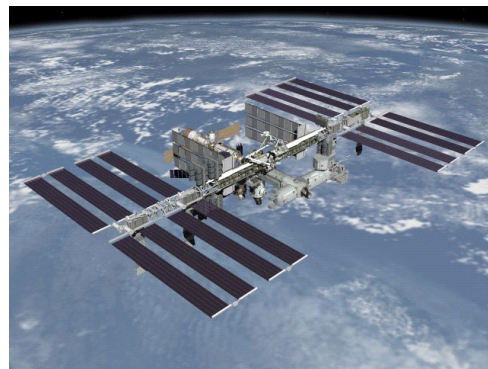


ISS - the International Space Station -

Looks like a very bright moving star. Often you can view this in the sky over Exeter. Go to www.westgatescienceclub.org.uk the 'Astronomy' page for the dates and times to view

the ISS from EXETER

The ISS circles about
240 miles the Earth.
52 computers control
the on board systems
It measures 357 feet end to end.



The 75 to 90 kilowatts of power is
supplied by an acre of solar panels.

The complex has now more
liveable room than a
conventional 5 bed roomed house.

THE PLANET SATURN - look for a yellowish star (though of course it's a planet) rises mid evening and is best seen this month and April. Look south to south east. With a good pair of binoculars and clear seeing you should be able to make out its rings.

