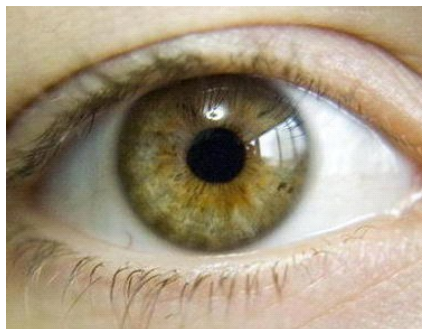




making science cool

Your eyes are the most complex organ you possess except for your brain.

Your eyes are composed of more than 2 million parts.



The eyeball of a human weighs about 28 grams.
The eye of a human can distinguish between 500 shades of grey.

Blinking helps to wash tears over our eyeballs. That keeps them clean and moist. Also, if something is about to hit our eyes, we will blink automatically.

Your eyes can process 36,000 bits of information every hour.

Your eyes are always the same size from birth, but your nose and ears never stop growing.

YOUR WESTGATE SCIENCE WORD SEARCH 1

LLYESLS SCIENCECE
 NEIITEEGCEOTXLE
 SVERLNDLNRABDIO
 HCTISSUENGNRI PN
 INGSEBRETINATUE
 EHEYELASHESIEPR
 TIESLLECTYCNYO V
 LEOOEWSDORETEXE

EYE	BRAIN	CELLS
CORNEA	DETECT	EYELASHES
EYES	IRIS	LENS
LIGHT	OPTIC	NERVE
PUPIL	RETINA	RODS
TISSUE	WESTGATE	SCIENCE
CLUB		EXETER

2 www.westgatescience.org.uk

Making
 'Elephant Toothpaste'
 demonstration
 experiment 14 January

3 x 8 foot high tall
 columns of 'gunge'

Adding saturated
 Potassium Iodide to
 Hydrogen Peroxide with
 a little help from some
 drops of food colouring
 and concentrated
 washing liquid.



The points of the compass
 What does N stand for ?
 Can you write the other 3
 main directions at the
 correct points ?



CHECK ANSWERS on
 Astronomy page on our
 web site

3 www.westgatescienceclub.org.uk

WESTGATE SCIENCE CLUB PUZZLE 2

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

WESTGATE	CLUB	CELL	SCIENCE
DNA	OXYGEN	CARBON	DIOXIDE
TELESCOPE	MICROSCOPE		CRYSTAL
SOUND	WAVES	ALKALI	SOLID
LIQUID	GAS	PH ARTICLE	SCALE

4

challenge yourself and your friends

- What is The Periodic Table? Is it:
 A A-Calendar. B-A list of scientific tables
 C-A list of all known elements
 D-A special birthday table
- The colours of the rainbow number seven, here
 are eight colours. Which is the odd one out:
 Red, Orange, Pink, Yellow, Green, Blue, Indigo,
 Violet.
- Which direction is the country of The
 Netherlands from the Exeter area.
- What temperature in centigrade does water
 freeze? A 10c B -32c C 0c D -3c
- At what temperature in centigrade does
 'Dry Ice' exist: A 0c B -20c C -50c D -78c
- How fast does light travel in one second?
 A 300,000 km B 100,00 km C 186,000 km
- How far away on average is the moon from the
 earth?
 A 384,500 km, B 200,500 km C 454,500 km
- What does NASA stand for?
 What is the third word?
 NATIONAL AERONAUTICSADMINISTRATION
 Did you know NASA have a kids club?
 See our web site...

Check answers on above on the
 ASTRONOMY PAGE at

5 www.westgatescienceclub.org.uk

MAGIC NUMBERS

Figure this out for anyone between 1 and 99 years

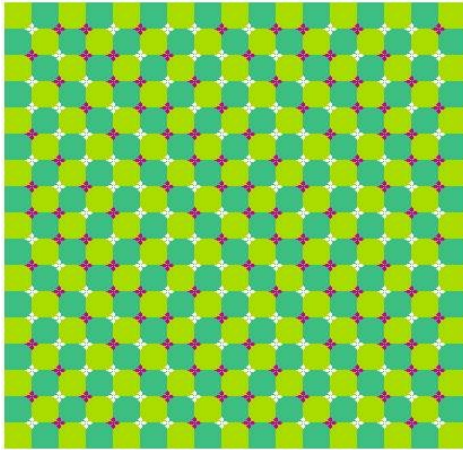
Take the last two digits of the year you were born in.

Add the age you will be at the end of this year.

Try it on yourself, try it on your friends

It will always have the answer of = 111 if born before 1999 or 11 if born on or after 2000

Eye Tricks—stare at this picture and move your head towards and away from it. Is it moving?



6

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

7

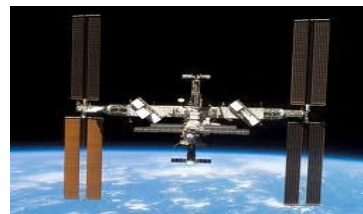
On a clear night have a look outside and look up towards the south and west, high in the sky you should see a tight group stars as in the picture. This is a group of stars called THE PLEIADES 7 bright stars. if you can get to a dark place to see from away from street lights and the glow of the city you should be able to see more. If you have a pair of binoculars you will see many more. There are thousands of stars in this cluster. Your eyes take about 20 minutes to adjust and become most sensitive when looking at a clear dark sky away from other lights and glare.



The planet JUPITER is slowly setting in the western 6 pm and later. It's bright and does not twinkle. With a pair of binoculars you should be able to see the planet's 4 brightest moons as points of light.

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



1. What two things in the sky affect the earth's tides?

2. How much water in a cucumber

A 56% B 66% C 76% D 96%

3. What time do you think the sun will set in a weeks time on 25th February - viewing over the hills west of Exeter

A 5.48 pm B 7.12 pm C 5.50 pm D 6.34 pm

(you can see any day / time-Exeter on the web site—Astronomy page - see sunrise sunset times).

4 Which is the deepest lake in the world:

A Lake Victoria, B Lake Baikal, C Lake Superior

Check out the answers on our web site - On the Astronomy page

8

www.westgatescienceclub.org.uk

