

WESTGATE SCIENCE CLUB

issue 4

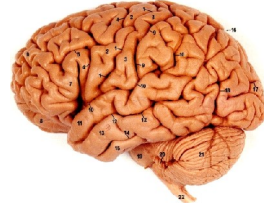
JANUARY 2011



making science cool

your brain.....

Your brain is about 2% of your body weight but uses 20% of your body's energy.



The energy used by your brain is enough to light a 15 watt bulb..

More electrical impulses are generated in one day by a single human brain than by all the telephones in the world.

How much does the human brain think? 70,000 is the number of thoughts that it is estimated the human brain produces on an average day.

Did you know that the human brain is approx 75% water! The brain contains about a hundred billion nerve cells.

The human brain is protected by the skull (cranium), a protective casing made up of 22 bones that are joined together.

YOUR WESTGATE SCIENCE WORD SEARCH

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

TESTTUBE SCIENCE CLUB
 SOLID LIQUID GAS
 ACID ALKALI SOLUTION

LITMUS PAPER BATTERY
 MAGNET NEUTRAL PH
 WESTGATE SCALE REACTIONS

You can also see this puzzle live on the physics page

A 9 volt battery,
 2 lead electrodes,
 some water, some
 salt. A big smile and
 we split water and
 made mainly bubbles
 of hydrogen. We
 could have had
 oxygen bubbles but
 we used salt to help
 the reaction so it was
 some chlorine
 bubbles.

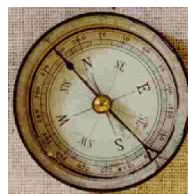


Two can play at that!
 One of our many
 'buzz machines'



The Compass Points

NORTH
 SOUTH
 EAST
 WEST



See what experiments Westgate Science Club has done
 so far - check out the contacts page at

The Puzzle

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

AIR	HEAT	ASTRONOMY	HYDROGEN
ATOM	ICE	BIOLOGY	MAGNET
BOILING	OXYGEN	BUBBLES	
	PHYSICS	CHEMISTRY	
SCIENCE		CLUB	
WATER	COLD	WESTGATE	

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THE SUN

- The Sun is a:
A planet, B star, C moon, D galaxy
- The Sun is:
A the centre of the Universe
B the centre of our galaxy
C the centre of our Solar System
- The earth orbits the sun every:
A 6 months
B 365 days
C every 2 years
- How long do you think the light from the sun takes to reach the earth?
A 8 seconds
B 8 minutes
C 8 hours
- You should never look at the sun directly
True or false & why ?
- When the moon hides the sun by being exactly between the earth and the sun it is called:
A an eclipse of the sun
B an eclipse of the moon
C an eclipse of the earth

Check out the answers on the astronomy page www.westgatescienceclub.org.uk
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MAGIC NUMBERS

Ask someone to double their age (either mentally or on paper) but, obviously, they must not tell you.

- Then to add 5 and multiply by 50.
- Finally, they must add the number of coins they have on them. If they do not have any, nothing is added.
- They then tell you the final answer.
- Now all you have to do is take away 250. The first two digits of the answer you are left with are the persons age and the last two the number of coins in their possession.

This works unless they are carrying over 100 loose coins.

Eye Tricks

Can you build this ?

I doubt very much. Use it to offer an extraordinary prize to the person who can build it!



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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 on 10th September 2010.
See what experiments we did on other club evenings.

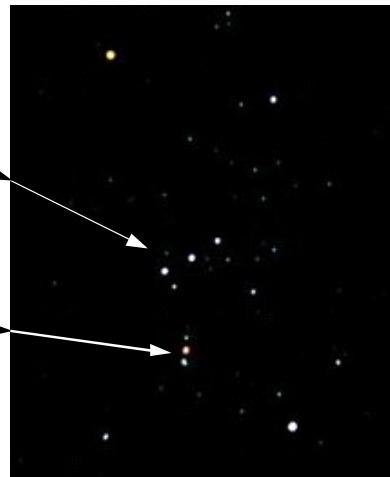
at www.westgatescienceclub.org.uk
Slide show and photos on the 'contacts' page

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On a clear night have a look outside and Towards the south high in the sky and see the constellation ORION

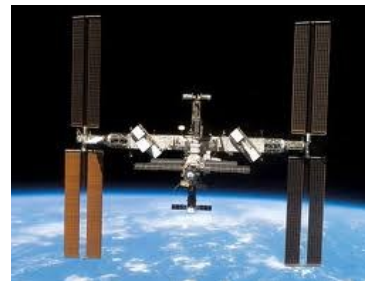
Can you see the 3 bright stars in a row

IF you look just below here you can see small 'fuzz' - this is an area of the sky where stars are formed, it's called THE ORION NEBULA' There are thousands of stars in this small area.



If you follow the 3 stars downwards about 4 times the distance of the 3 stars you will see a very bright star called SIRIUS—the brightest star in the sky.

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 planet Jupiter can still be seen towards the south west after sunset. It looks like a bright star but is actually a planet.

If you are up early in the morning before sunrise and look towards the east you will see the planet Venus shining brightly.