

#### Inside this issue:

How does this add up? A look at world economics.	2
Upside down numbers	2
Horsemeat scandal statistics	2
Temperature test!	3
Puzzle of the month	3
Chinese New Year	4
Exam countdown	4

After School Classes

#### Monday-

Higher and Adv. Higher

- Mathematics
- Tuesday-
- Intermediate 2
- Mathematics
- Thursday-
- S1-S3 Mathematics
- Higher Mathematics

#### February 2013

Volume 2: Issue 1

### China - the world's factory?

Look at the label on, or look at the back of many products and you will more than likely see 3 words- 'Made In China.' The reason behind there being so many goods made in China is that the labour costs are low. The average Chinese worker make \$0.81 an hour. (About 66p) China has a workforce of over 112 million workers.

#### China makes

£1,253,951,552,000 a year from exports. Above is an infographic showing the main countries that China exports to. United States receive more than 20% of the Exports. 9% of those exports end up on Wal-

### Did you know...?

What number does 'Google' represent?



'Google' comes from the number 'Googol' United states ux Republic of Korea Support

Mart's shelfs. United Kingdom receives only 2.9 % of exports. China's major exports

are: electromechanical products (57 percent of total exports) and labourintensive products like clothing, textiles, footwear, furniture, plastic products, bags and toys (20 percent). In recent years, the exports of high

#### tech products have been also growing and in 2012 accounted for 29 percent of total exports. China surpassed the U.S. to become the world's biggest trading nation last

year. Sources: www.tradingeconomics.com

http://www.bloomberg.com www.wikipedia.co.uk,

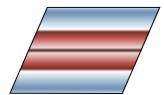
A **googol** is the <u>large num-</u> ber 10<sup>100</sup>; that is, the <u>digit</u> 1 followed by 100 <u>zeroes</u>.

A **Googolplex** is 10<sup>900gol</sup> that is, the number followed by a googol of zeroes.

The Googleplex is the corporate headquarters of Google located in Santa Clara, California.

The name googol was thought up by a nine year old nephew of the American mathematician Edward Kasner

> Source: http:// en.wikipedia.org





## 'A nut for a

## jar of tuna'



## 'Radar'

'5335'

## How does this add up?

The economics of the world display alarming injustices. An overview reveals some quite startling statistics. A minority of the world's population (17%) consume most of the world's resources (80%), leaving almost 5 billion people to live on the remaining 20%. As a result, billions of people are living without the very basic necessities of life - food, water, housing and sanitation.

The amount of money that the richest 1 percent of the

### Upside down numbers

A palindrome is a word, number or sentence that reads the same backwards as forwards. An ambigram is a logo or graphic that will look the same from a different orientation (see examples left)

Some numbers look the same when turned upside down. 0,1,and 8. 6 and 9 look like each other when turned upside down.2,3,4,5 and 7 don't look like digits when turned



Population

20%

20%

20%

20%

20%



world's population makes

each year equals what the

poorest 57 percent makes.

20% of the people in devel-

oped nations consume 86%

12% of the world's popula-

tion uses 85 percent of its

of the world's goods.

The year 1691 looks the same when you read it upside down.



Puzzle: Which year in the past is the most recent that looks the same when you read it upside down? 1961

Income

82.7%

11.7%

2.3%

1.9%

1.4%

The unequal distribution of

world income

Source: http://

worldcentric.org

water.

Which year in the future is the closest one that will look the same when turned upside down? 6009

#### Article by Mark Rae 1a1

Source: Hoard of mathematical treasures by Professor Stewart

# Horsemeat Scandal Statistics



Some Findus meals were found to contain up to 100% horsemeat.

Cottage Pies destined for 47 schools in Lancashire have been withdrawn.

An economy beef burger can legally contain as little as 47% beef.

1% horsemeat in burgers is 'acceptable' by the British government. Some supermarkets are claiming to have cleared full ranges of beef burgers from their shelves after a company was found to have supplied Tesco beef burgers containing up to 29% horsemeat. There was another horsemeat scandal in 1948.

Article by Mark Rae 1a1 Sources: www.dailymail.co.uk http://www.telegraph.co.uk http://www.bbc.co.uk http://www.haras-nationaux.fr

www.guardian.co.uk



### **Temperature Test!**

George wants to give his dog a bath. One tub contains water at 20° Centigrade and another tub contains water at 20° Fahrenheit. In which tub should George

choose to bathe the dog?

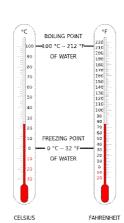


Answer: 20°Centigrade (the other is below freezing).

The metric system uses the Celsius scale to measure temperature. However, temperatures are still measured on the Fahrenheit scale in the U.S.

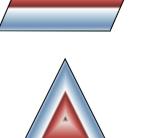
Water freezes at 0° Celsius and boils at 100° Celsius which is a difference of 100°. Water freezes at 32° Fahrenheit and boils at 212° Fahrenheit which is a difference of 180°. Therefore each degree on the Fahrenheit scale is equal to 100/180 or 5/9 degrees on the Celsius scale

How to convert Fahrenheit



temperatures to Celsius

Subtract 32° to adjust for the offset in the Fahrenheit scale. Multiply the result by 5/9.



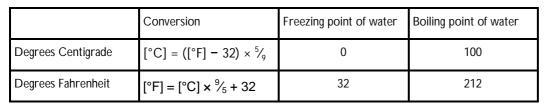
Volume 2: Issue



## Quote:

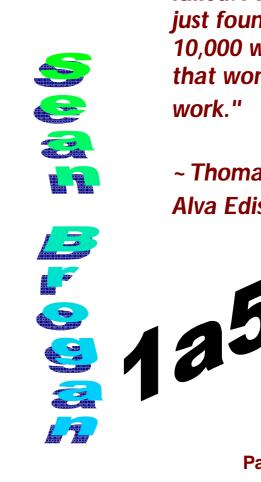
"I have not failed. I've just found 10,000 ways that won't work."

~ Thomas Alva Edison



### **Puzzle of the Month**





Page 3



Latest News About Us × Celebrating Success × Timelines × Severe Weather Contingency

Dates to note in February

7th-12th: Mid Term

11th:

S5/6 Prelims begin

28th:

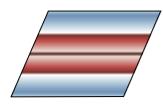
Careers evening



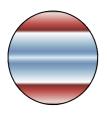
Happy Chinese New Year!

Between February 10<sup>th</sup> 2013 and January 30<sup>th</sup> 2014 is the year of the snake.









## Maths Exams 2013

Wednesday 22nd May

Intermediate 1,

Intermediate 2,

Advanced Higher

take place on the

Higher and

Maths exams

above date.



Study timetables should be in place!



Countdown: Number of full weeks left: