

1. 30.9% have a party
2. 72% hand out sweets
3. 44.2% carve a pumpkin
4. 31.7% take children out
5. 47.5% decorate their homes

The heaviest pumpkin ever weighed 2032 pounds or 923.64 kilograms. That's huge!

2. According to Irish legend, Jack O'Lanterns are named after a stingy man named Jack who, because he tricked the devil several times, was forbidden entrance into both heaven and hell. He was condemned to wander the Earth, waving

## Creepy Calculations

BOO! It's Halloween again and we have some creepy Halloween statistics for you.

Some of the most dressed-up-in costumes this year have been:

1. White Stealth Ninja
2. Cross eyed monster
3. A minion from 'Despicable Me'
4. A soldier
5. A headless horseman



In the United States :

his lantern to lead people away from their paths.

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## Quote for thought

"I hear and I forget, I see and I remember, I do and I understand" (Confucius) "

### After school classes

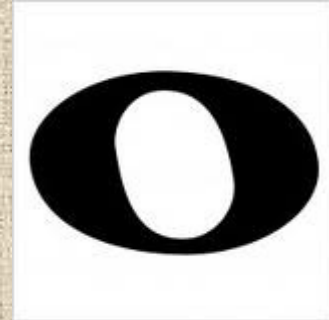
- Monday:
  - Higher & Advanced
  - Higher Maths
- Tuesday:
  - Intermediate 2
- Thursday:
  - S1 to S3
  - Higher

## Music and Numbers

Music and numbers are all connected. There are many aspects of music that have to do with how long a note is or how fast to play and others. The one I shall tell you about today is about how the way notes look, it signifies how long they last for.

To make all of this make sense, I shall explain a tiny bit of music theory to you.

Here, this is a **WHOLE NOTE**. This is a very important note. It lasts the amount of beats that are indicated by the top number of the **TIME SIGNATURE**.



Now that is out the way, and you hopefully understand a **WHOLE NOTE**. You will hopefully be able to understand all these weird and wonderful notes.

This note is called **A MAXIMA**.

It is a very long note indeed. It is also very rarely used nowadays.

It lasts **12 TIMES** as long as a **WHOLE NOTE!!**

So if you were in 4/4 time signature it would last:



1...2...3...4 1...2...3...4 1...2...3...4 1...2...3...4  
1...2...3...4

1...2...3...4 1...2...3...4 1...2...3...4  
1...2...3...4

1...2...3...4 1...2...3...4 1...2...3...4



**CRAZY?! Isn't it?**

Now to the other extreme. This note is called a **DEMISEMIHEMIDEMISEMIQUAVER** (That was a mouthful..!) or a **TWO-HUNDRED-AND-FIFTY-SIXTH NOTE** for shorter, pronunciation and memories sake.

must tell you that these aforementioned notes are very rare indeed but they do exist and I thought it would be good if you know a bit about them.

An extreme case is the 'Toccata Grande Cromatica' by early-19th-century American composer Anthony Philip Heinrich, which uses notes as short as 2,048th notes; however, the texts states that it has been printed wrong and they should be 1,024th notes.



## Celebrating achievement

S2 did their maths test recently and they all did really well You all deserve a pat on the back :)

Best get studying for the standardised tests!

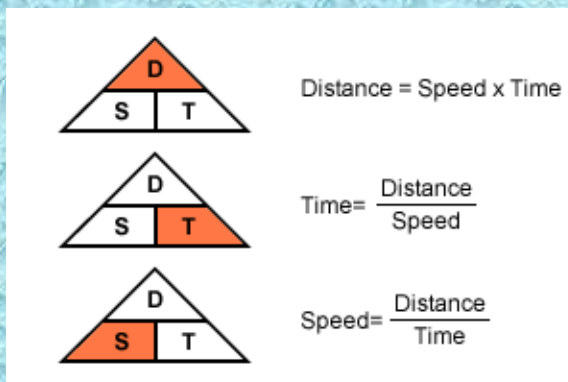


### Fast and Furious Math!

How long is the runway in Fast & Furious 6?

Based on the 13 minutes duration, high octane action packed sequence, and based in mathematical calculations of average plane speed, car speed and simultaneous action sequence, the runway has an estimated length of... 18.37 miles or 29.6km!

The longest paved runway in the world is the Qamdo Bamda air-



port in China, at around 3.5 miles (5.6km). You can use the formula Distance= speed x time to find the distance travelled!

So This scene is super unrealistic to Mathematicians

by Mr. Mardones

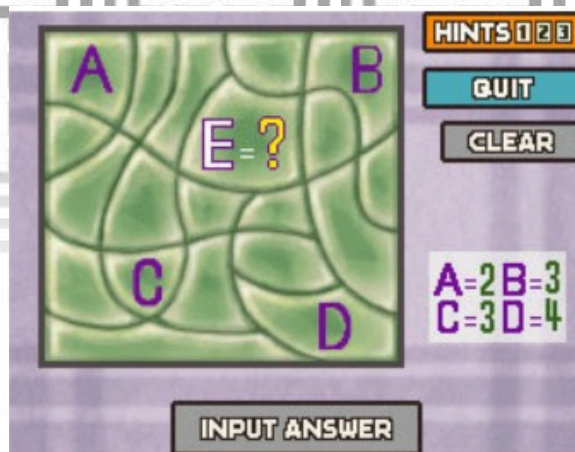


Solution to October Newsletter Professor Layton's Puzzle

The answer is 59 minutes. It takes one minute for a single germ to split into two. Therefore starting with two germs instead of one, only saves you one minute.

November's Puzzle

According to the diagram shown here,  $A=2$ ,  $B=3$ ,  $C=3$  and  $D=4$ .



The Millenium Prize Problems.

There are 7 very hard maths problems called The Millenium Prize Problems. They are questions that have been haunting Mathematicians for years. A correct solution to any of the problems gets you a prize of \$100,000, not bad! One has been solved by a Russian mathematician, but he refused the prize and said that he wanted his work to be for the good of all humanity, but not for his financial gain. That is really nice isn't it? Instead the money was used to buy books and things for a group of very good young mathematicians, who may solve a problem in the future.

Do you want a go at one? Go To: <http://www.claymath.org/millennium/>

In one of our issues a little while back we mentioned about GIMPS prime testing. You can get a \$100,000 if you find a new prime. And the best thing is that your computer does all the work! What's to lose? Prime95 is free to download and all you need to do is install it and leave your laptop or computer plugged in and turned on and connected to the web and you could find a new prime! Search 'GIMPS' to sign up!

Do you have any items for inclusion in next months newsletter?

Please submit articles of interest to Mr Mardones in Maths .

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