



# Firrhill High School Maths Department Newsletter

Issue 1  
August 2016



@firrhillmaths1

[www.firrhillmaths.weebly.com](http://www.firrhillmaths.weebly.com)

## News

The department has welcomed several new members of staff this term Miss Liggett has taken occupancy of Miss Ham's room, Mr Koturbasz

has come on board and is working down in the Maths dungeons with Mr Isdale and Mr Evans has joined us to help out on a part time basis. Along with Mrs Smith returning later in the year it is a nice full ship.

The exam results for the department were very good overall with most pupils performing at the level expected or above. The number of passes is up in National 5 and Higher with the percentage of pupils achieving A grades particularly pleasing. Well done to all those who got the grades they were looking for.

## Cool Maths

### Square numbers:

0,1,4,9,16,25,36,49,64...

Take successive differences:

1,3,5,7,9,11,13,15

Again, take successive differences:

2,2,2,2,2,2,2....

The second successive differences are constant (equal to 2).

Check it out to see if this works with any other powers and see if you can predict the constant for any power?

### Cube numbers:

0,1,8,27,64,125,216,343,512,...

Take successive differences repeatedly:

1,7,19,37,61,91,127,169,...

6,12,18,24,30,36,42,...

6,6,6,6,6,6,6,...

The third successive differences are constant (equal to 6).

## Thought of the Month

IF YOU GOOGLE "LOST  
MEDIEVAL SERVANT BOY"  
IT WILL TELL YOU "THIS  
PAGE CANNOT BE FOUND"...

## Puzzle of the Month

Liam's house has a staircase with 12 steps. He can go down the steps one at a time or two at a time. For example he could go down 1 step, then 1 step, then 2 steps, then 2,2,1,1,1,1.

How many different ways can Liam go down the 12 steps, taking one or two steps at a time?

## Upcoming Events

Not much going on in the department this month however you can keep up to date with anything that is on our website and twitter feed.

Look out for posters going up in the department regarding Supported Study classes at lunchtimes and after school.