



Year 10 Parents/Carers

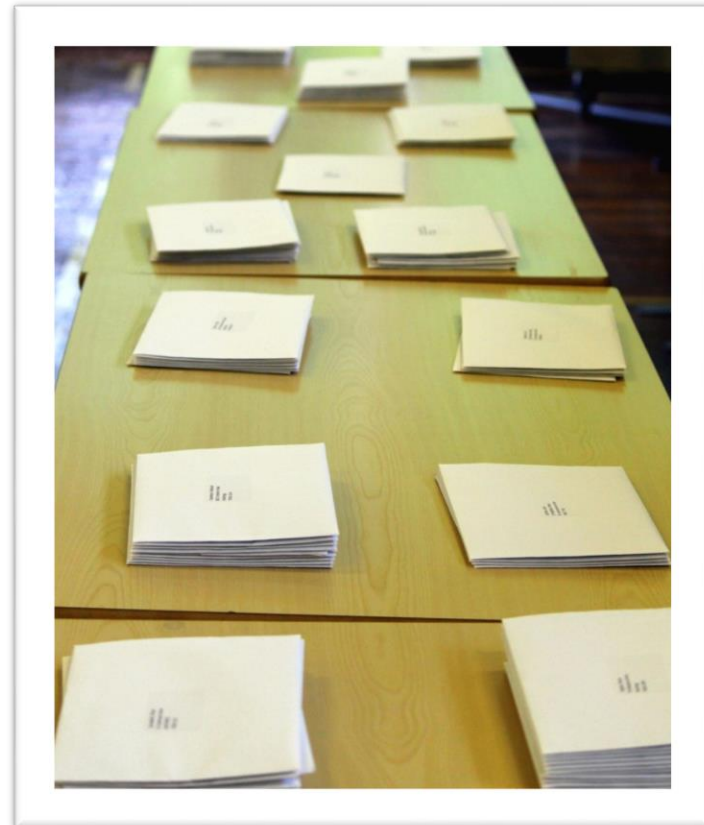
Maths GCSE Preparation Evening September  
2015

# Purpose of the evening



**By the end of the evening you should have:**

1. A full understanding of the key expectations, events and challenges of Year 10.
2. A variety of strategies to use to support your daughter in her learning.



# Our Expectations



- Committed to turning potential into exceptional achievement
- Centred on students, learning and achievement
- Committed to working partnership with parents and students
- To have high expectations of ALL students in ALL respects.

# 2014-2015 Maths GCSE Results

- A\* to A: 10%
- A\* to B: 37%
- A\* to C: 67%
- 71% of students made the expected progress (National expectations are three levels of progress based on the KS2 result)



# Maths – The exam

- Three papers – Two calculator papers and one non-calculator.
- The exam time has increased from 3.5 to 4.5 hours.
- There is a higher element of problem solving on both papers.
- Higher content is included on both papers.
- No coursework, purely exam based.
- Two tiers.
- Higher = 4 to 9
- Foundation = 1 to 5
- Early entry to the exams is no longer available. All students will sit their Maths GCSE in June 2016.

# Comparison with the Old Spec

- A “C” grade is still achievable on both papers.
- A grade 9 means that a student will be in the top 3%.

MATHEMATICS



# Maths - Resources



- MyMaths
  - We have found that those students who regularly access MyMaths feel more confident about their own ability
    - Immediate marks given
    - Red/Amber/Green indicated
    - Booster packs
    - Levelled tasks
    - Lessons provided online to support independent study
- [www.mymaths.co.uk](http://www.mymaths.co.uk)
- Username: helenswood                      Password: mathsrocks

# Maths - Resources



- Revision guides and workbooks
- Half price if bought through the school at £5 for the pair.
- Use early and target their revision.

Had a look  Nearly there  Nailed it!  **NUMBER**

**Percentage change**

There are two methods that can be used to increase or decrease an amount by a percentage.

**Method 1**

Work out 25% of £200:

$$\frac{25}{100} \times £200 = £70$$

Subtract the decrease:

$$£200 - £70 = £130$$

**Method 2**

Use a MULTIPLIER.

$$100\% + 30\% = 130\%$$

$$\frac{130}{100} = 1.3$$

The multiplier for a 30% increase is 1.3

$$400\text{ g} \times 1.3 = 520\text{ g}$$

C  
D  
E  
F  
G

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**Worked example** grade E

Kaz buys a car. The normal price of the car is £7200  
Kaz gets a 10% discount.

(a) Work out 10% of £7200

$$\frac{10}{100} \times £7200 = £720$$

(b) Work out how much Kaz pays for the car.

$$£7200 - £720 = £6480$$

**EXAM ALERT!**

Only half of students got full marks on this question. Make sure you know that words like discount and depreciation mean that you have to decrease the price.

You can also use the multiplier method:

$$100\% - 10\% = 90\%$$

$$\frac{90}{100} = 0.9$$

so the multiplier for a 10% decrease is 0.9

$$£7200 \times 0.9 = £6480$$

This was a real exam question that caught students out – be prepared!

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**Worked example** grade D

A football club increases the prices of its season tickets by 4.8% each year.

In 2010 a top-price season ticket cost £550  
Calculate the price of this season ticket in 2011.

$$\frac{4.8}{100} \times 550 = 26.4$$

$$£550 + £26.40 = £576.40$$

When working with money, answers must be given to 2 decimal places.

**Check it!**

10% of £550 is £55, so 5% is £27.50

$$£550 + £27.50 = £577.50$$

which is close to £576.40

A question may also ask you to write one quantity as a percentage of another.

For a reminder have a look at page 16.

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**Now try this** grade D

1. The normal cost of a coat is £94  
In a sale the cost of the coat is reduced by 36%.  
Work out the sale price of the coat. (3 marks)

(cost of book before VAT) × 1.2 = £9.12

2. Alistair sells books.  
He sells each book for £9.12 including VAT at 20%.  
Work out how much each book costs before VAT. (4 marks)

**edexcel**



# Maths – What can we do?



- Provide high quality lessons
- Target students that are underachieving through regular and thorough analysis of any MOCK examinations.
- Give you any information that you require.
- Offer external revision sessions and guidance for students.

[kmurphy@helenswoodacademy.org](mailto:kmurphy@helenswoodacademy.org)

# Maths – What can you do?



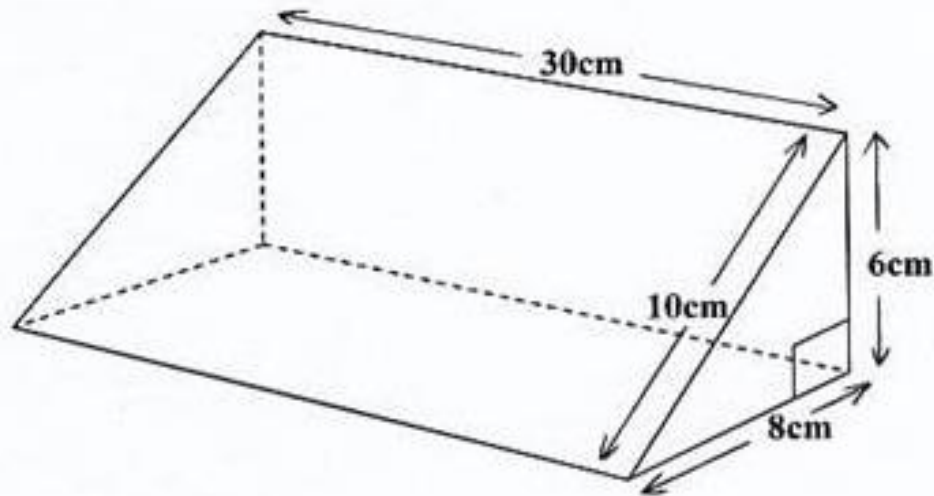
- Support students and encourage them to use MyMaths or revision guides regularly.
- Persuade and coax or nag and moan?
- Remain positive – Maths can be learnt
- Get involved – Ask them to explain what they have worked on in lesson to you.



# What does a C question look like?

The diagram below shows a triangular prism.

The diagram is **NOT** drawn accurately.



Calculate the volume of this triangular prism.



# Homework, Revision, Exam details

- Homework will be set once a week, one of them being from a homework booklet and another one accessible using the MyMaths website mentioned earlier.
- The exam details are as follows:
  - Term 2: Full Mock
  - Term 4: Full Mock
  - Term 6: Full Mock

Any Questions?