# **Key Information**

Core principles of mathematics including number, geometry, algebra & statistics

## To achieve a Grade 8, I will be able to:

- Understand & use standard form
- Expand and factorise quadratics
- Shade inequalities
- Draw & use cumulative frequency curves & box plots
- Work with fractional & negative indices
- Work with upper & lower bounds
- Re-arrange formulae
- Enlarge with negative scale factor
- Draw histograms
- Solve quadratics
- Work out unknown sides & angles using Trigonometry
- Complete & use tree diagrams to find probability
- Solve quadratics by factorising & using the quadratic formula
- Solving simultaneous equations including quadratics
- Using sine & cos rules
- Working out area of sector & length of arc
- Stratify samples
- Work out unknown angles using circle theorem
- Covert recurring decimals to fractions
- Work through problems involving direct and inverse proportion
- Work with algebraic fractions
- Transform functions
- Find vectors

### To achieve a Grade 5, I will be able to:

- Work out averages from frequency/ grouped frequency tables
- Calculate area of shapes (e.g compound shapes, circles, trapezium)
- Solve equations using the balance method
- Work out unknown sides using Pythagoras theorem
- Work out unknown angles using angle facts including angles in parallel lines
- Collect like terms
- Change the subject of a formula
- Expand &Factorise expressions
- Know & use the laws of indices
- Interpret Time Graphs
- Work out the volume of a prism
- Work out probability
- Interpret questionnaires
- Form and solve equations
- Construct triangles
- Identify loci
- Work out the nth term of a sequence
- Work through bearings questions
- Understand trigonometry
- Solve simultaneous equations

## Units, weighting & deadlines:

- 3 papers in May/June 2017
- Tiers of entry: Foundation and Higher
- Each paper is 1hr 30 minutes long and is equally weighted

#### **KEY CONTACT:**

Mrs H Saeed – hsaeed@westonfavellacademy.org Mr J Bizimana – jbizimana@westonfavellacademy.org

#### EXAM BOARD: Edexcel

#### **REVISION TEXTS:**

Author: Collins GCSE Edexcel GCSE Revision (Higher) ISBN: 978-0-00-811036-9 GCSE Foundation booster book

ISBN: 9780008114190

#### **USEFUL WEBSITES:**

<u>www.mymaths.co.uk</u> username: favell password: square

#### https://www.mathswatchvle.

<u>com/</u> centre id: westonfavell user id: apupil password: mathswatch