Bishop Heber High School

Subject	Year	Term
Maths	8	1

Topics

Proportional Reasoning and Representations

Content (Intent)

Prior Learning (Topic) Constructions and Geometric Reasoning, Number sense, Prime Numbers and Probability

- Ratio and scale
- Multiplicative change
- Multiplying and dividing fractions
- Working in the cartesian plane (graphs)
- Representing data
- Tables and probability

Future Learning (Topic) Algebraic Techniques and Developing Number Sense

What Knowledge and Skills will be taught (Implementation)	How will your understanding be assessed & recorded (Impact)
• Understand and use ratio • Simplify ratio and express in the form 1:n • Divide quantities into ratios • Solve proportional problems involving ratio • Investigate pi in relation to diameter and circumference (H) • Explore direct proportion and conversion graphs • Understand scale factors and explore within similar shapes and maps	<u>Ongoing Assessment</u> • Q&A in plenary • Mini-whiteboards • Self and Peer assessment • 1 written homework per fortnight • 1 online homework per fortnight • Feedback and Challenge Time (FACT)
• Multiplying and dividing with fractions, including use with mixed numbers and improper fractions • Works with co-ordinates across all four quadrants • Investigate and draw straight line graphs • Explore non-linear relationships (H) • Explore and represent data using various graphical forms • Investigate various types of data and how best to represent it • Explore probability within various representations – samples spaces, two-way tables and venn diagrams • Use of the product rule for finding total possible outcomes (H)	<u>Formal Assessment</u> • November end of term test

How can parents help at home?

Encourage use of MyMaths (www.mymaths.co.uk)
Practise times tables on a regular basis – Pixl times table App

Helpful further reading/discussion (including Reading and Vocabulary Lists)

Reading

Direct to the following websites (logon id's will be in the front of the orange maths book);
www.mymaths.co.uk
vle.mathswatch.co.uk
www.mathsgenie.co.uk

Vocabulary Lists

Proportion
Notation
Scale factor
Multiplicative
Radius
Circumference
Diameter
Numerator
Denominator
Reciprocal
Quadrant
Cartesian Plane
Gradient
Parallel
Perpendicular
Intercept