

MATHS PROGRESSION:

Measurement

- ◆ Compare and estimate lengths, heights, mass, volume/capacity
- ◆ Record findings using the correct symbols < > =

- ◆ Compare and sequence different intervals of time and know how many mins in an hour/ hours in a day etc
- ◆ Use the clockface to count in short time intervals, demonstrate understanding of different time intervals and periods of time using the hands of the clock (quarter to/past)

- ◆ Select efficient methods for measurement of length (cm,m), weight, time, temperature and volume.
- ◆ Use measuring tools effectively to ensure accuracy of measurement and evaluation against estimation

YEAR 2

- ◆ Begin to use mathematical vocabulary such as longer, shorter, larger, heavier, lighter when exploring different items

- ◆ Explore items with different lengths, heights, weights etc to practise the use of mathematical vocabulary/reasoning when comparing/ classifying different objects

YEAR 1

- ◆ Compare different representations of length/ height and apply correct vocabulary
- ◆ Compare different weight, mass, capacity, volume and measure using standard/non-standard units

YEAR 1

- ◆ Use and apply knowledge of addition and subtraction when comparing lengths / heights/ weight/ volume money and time
- ◆ Develop fluency in terms of vocabulary to use when explaining and communicating ideas / conjecturing
- ◆ Begin to identify different coin and note denominations for money
- ◆ Problem solve using money and apply calculation methods accordingly

YEAR 4

- ◆ Find the area of rectangular shapes by counting squares
- ◆ Read and write the time in 12 and 24 hour; convert between the two

- ◆ Find different combinations of coins that generate the same amount
- ◆ Know the relationship/value between p and £
- ◆ In a practical sense, solve simple addition and subtraction problems that involve money (giving of change)

Key:

Counting

Reading scales & Writing quantities

Identifying, Representing & Estimating Numbers / amounts

Comparing when measuring with accuracy

Problem solving & Reasoning

Mental arithmetic and known facts

Practical exploration

- ◆ Estimate and compare a range of different measures; calculate within the given units of measure (in all contexts)
- ◆ Measure and calculate the perimeter of rectangular shapes (cm/m)
- ◆ Convert m to km, mins to hours and vice versa
- ◆ Solve problems in context of measure (combine time and distance into one along with other similar e.gs)
- ◆ Know days in a month (inc. leap year) weeks in a year, years in a decade/century

YEAR 3

- ◆ Measure the time in terms of hours/mins
- ◆ Count in 5 minute intervals ; use the clockface to demonstrate understanding of an hour/half-past (draw hands)
- ◆ Sequence events in the day assigning a time and order to the school day. Use vocabulary; before, after
- ◆ Develop understanding of larger time intervals; days, weeks, months and years

- ◆ Add and subtract money (p and £). Give change
- ◆ Read the time with accuracy , demonstrate on a clockface
- ◆ Know the relationship between seconds and minutes, minutes and hours, days in month etc
- ◆ Read the time on an analogue clock (inc Roman Numerals) and begin to understand time in terms of 24 hour clock

YEAR 5

- ◆ Calculate and compare with squares and rectangles the area cm^2/m^2
- ◆ Estimate the area of irregular shapes

- ◆ Explore the cubic measurement of 3-D constructions (volume)
- ◆ Use all 4 operations to solve problems involving all facets of measure ; including decimal notation

- ◆ Calculate /measure the perimeter & area of a range of shapes (inc. composite shapes) based on the given formulae and relative knowns
- ◆ Recognise and fluently recite square and cubed numbers

- ◆ Solve problems involving all areas of measure and convert units of measure confidently
- ◆ Understand and use conversion in relation to metric and imperial units of measurement (cm to inches, pounds to grams etc)

- ◆ Measure, compare and add/subtract lengths, mass, volumes etc
- ◆ Measure the perimeter of simple 2-D shapes
- ◆ Problem solve in the context of real-life problems involving time, mass, length

- ◆ To compare and calculate the time duration for certain events (focus on everyday e.gs)
- ◆ Estimate and read time with increasing confidence, supported by developed use of mathematical language

- ◆ Calculate and compare the volume of a variety of different cubes and cuboids; construct models based on given criteria (cm^3)

- ◆ Convert units of measure; up to 3.d.p
- ◆ Reason and problem solve with perimeter and area and compare the two readily

- ◆ Calculate the area of parallelograms and triangles using the correct methods; select where the use of a formula is appropriate
- ◆ Solve problems relating to real-life examples where measure is used

YEAR 6

- ◆ Convert between miles and kilometres
- ◆ Understand why cm^3 is used as a unit of measure for cuboids (volume)

- ◆ Measure/calculate the capacity of vessels
- ◆ Tackle multi-step problems where selective use of operation and varied units of measure are apparent