Year 5 Exceeding Expectations:

- Understand numbers well beyond 1,000,000 and their connection to distances to planets; history and geography.

- Divide whole numbers (up to 4 digits) by 2-digit numbers, using preferred methods.

- Use rounding as a strategy for quickly estimating answers before calculating.

- Link working across zero for positive and negative numbers to working out time between BC and AD in history.

- Recognise the symbol for square root (√) and work out square roots for numbers up to 100.

- Calculate number problems using algebra (e.g. $2x - 3 = 5$).

- Use knowledge of measurement to create plans of areas around school (e.g. a classroom, the field, outside play areas etc.).

- Relate imperial measures still used regularly to their metric equivalents (e.g. miles/km and lbs/kg).

- Use a range of timetables to work out journey times around the world (e.g. 'How long would it take to reach the rainforests in the Amazon?')

- Collect data for a personal project and present information in a format of their choice (e.g. charts, graphs or tables).

Lammack Primary School

End of year expectations

Year 5

Mathematics

This booklet has been produced as an aid to help you and your child with the skills that are required this year, these are the expectations for the <u>end of year</u>. In class, we will be working towards these goals throughout the year and would appreciate your help and support in doing this. These skills would be useful to refer to when supporting your child with their homework. Thank you.

Year 5 Expectations: Number

- Count forwards and backwards in steps of power 10 (10, 100, 1000, 10000 etc.) for any given number up to 1,000,000.

- Recognise and use thousandths and relate them to tenths, hundreds and decimal equivalents.

- Recognise mixed numbers (a whole number and a fraction, e.g. 2¼) and improper fractions (where the numerator is greater than the denominator (e.g. 6/4) and convert from one to the other.

- Read and write decimal numbers as fractions (e.g. 0.47 = 47/100).

- Recognise the per cent symbol (%) and understand that per cent relates to the number of parts per hundred.

- Write percentages as a fraction with denominator 100, and as a decimal.

- Compare and add fractions whose denominators are multiples of the same number.

- Multiply and divide mentally using times tables up to 12 x 12.

- Divide numbers up to 4-digits by 1-digit numbers.

- Round decimals with 2 decimal places to the nearest whole number and to 1 decimal place.

- Recognise and use square numbers and cube numbers and the notation for squared (^{2}) and cubed (^{3}).

- Round any number up to 1,000,000 to the nearest 10, 100, 1,000, 10,000 and 100,000.

- Multiply and divide whole numbers and decimals by 10, 100 and 1000.

- Multiply numbers up to 4-digits by a 1 or 2-digit number using formal written methods, including long multiplication for 2-digit numbers.

- Solve problems involving multiplication and division, where large numbers are used, by finding their factors.

- Solve addition and subtraction problems with more than one step, deciding which operations and methods to use and why.

- Solve problems involving 3 decimal places and problems which require knowledge of percentages and decimal equivalents.

Year 5 Expectations: Measurement, Geometry and Statistics

- Know angles are measured in degrees.
- Estimate and compare acute; obtuse and reflex angles.
- Draw given angles and measure them in degrees (º).
- Convert between different units of metric measures and estimate volume and capacity.
- Measure and calculate, in centimetres and metres, the perimeter of shapes with straight sides.
- Calculate and compare the area of squares and rectangles including using standard units (cm^2 and m^2).
- Solve comparison, sum and difference problems using information presented in a line graph.