## What I need to know: Y3 Maths

We aim to be the school of choice for our community.
Through living our Christian values, everyone at WCEJS has the opportunity to flourish.
We nurture the curiosity to learn, the courage to lead and the compassion to care.
Building solid foundations (Matthew 7: 24-27)

Name:
Class:

In Y3 you will learn more about; number and place value; the basic operations of addition, subtraction, multiplication and division; fractions and decimals; measurement; shape; statistics.

| Skills I may use when learning maths |  |
| :--- | :--- |
| Remember: name, identify, describe | Analyse: investigate, infer, select, clarify |
| Understand: predict, recall, interpret | Create: plan, design, construct |
| Apply: use, show, relate, demonstrate | Evaluate: compare, assess, judge |


| 1. What I will know about Number and Place Value | Start End |
| :---: | :---: |
| Count from 0 in multiples of 4 and 8 | $\bigcirc \bigcirc$ |
| Count from 0 in multiples of 50 and 100 | $\bigcirc \bigcirc$ |
| Find 10 or 100 more or less than a given number | $\bigcirc \bigcirc$ |
| Recognise the place value of each digit in a three-digit number (HTO) | $\bigcirc \bigcirc$ |
| Compare and order numbers up to 1000 | $\bigcirc \bigcirc$ |
| Identify, represent and estimate numbers using different representations | $\bigcirc \bigcirc$ |
| Read and write numbers up to 1000 in numerals and in words | $\bigcirc \bigcirc$ |
| Solve number problems and practical problems involving number and place value | $\bigcirc \bigcirc$ |
| Vocabulary I need to know... |  |
| How well do you know the following words? <br> 1. I have heard the word, but I don't know what it means <br> 2. I understand what the word means <br> 3. I can explain what the word means and give other examples |  |
| decimal place, decimal point, place value, ones, tens, hundreds, thousands, tenths, numeral, near number |  |
| Resources I can use to help me |  |
| Place value flip chart, place value slide card, Deines maths set (base 10), abacus, beads |  |


| 2. What I will know about addition and subtraction | Start End |
| :---: | :---: |
| Add and subtract numbers using concrete objects, pictorial representations, and mentally, | $\bigcirc \bigcirc$ |
| Add numbers with up to three digits, using formal written methods of columnar addition | $\bigcirc \bigcirc$ |
| Subtract numbers with up to three digits, using formal written methods of columnar subtraction | $\bigcirc \bigcirc$ |
| Estimate the answer to a calculation | $\bigcirc \bigcirc$ |
| Use inverse operations to check answers | $\bigcirc \bigcirc$ |
| Solve problems that involve addition and subtraction | $\bigcirc \bigcirc$ |
| 3. What I will know about multiplication and division | Start End |
| Recall and use multiplication and division facts for the 3 x table, $4 \times$ table and $8 \times$ table | $\bigcirc \bigcirc$ |
| Solve multiplication number sentences using known tables, including TO $\times \mathrm{O}$ using mental and progressing to formal written methods | $\bigcirc \bigcirc$ |
| Solve division number sentences using known tables that I know, including TO x O using mental and progressing to formal written methods | $\bigcirc \bigcirc$ |
| Solve problems that involve multiplication and division | $\bigcirc \bigcirc$ |
| Vocabulary I need to know... |  |
| factor, inverse, commutative, multiples, multiplier, divisor, dividend, product |  |
| Resources I can use to help me |  |
| Multi-link, Abacus, times table grids, 100 grid, counters |  |


| 4. What I will know about fractions and decimals | Start | End |
| :---: | :---: | :---: |
| Count up and down in tenths | $\bigcirc$ | $\bigcirc$ |
| Recognise that tenths come from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10 | $\bigcirc$ | $\bigcirc$ |
| Recognise, find and write fractions of a set of objects | $\bigcirc$ | $\bigcirc$ |
| Recognise and use fractions as numbers: (unit fractions \& non-unit fractions with small denominators) | $\bigcirc$ | $\bigcirc$ |
| Recognise and show, using diagrams, equivalent fractions with small denominators | $\bigcirc$ | $\bigcirc$ |
| Add and subtract fractions with the same denominator within one | $\bigcirc$ | $\bigcirc$ |
| Compare and order unit fractions, and fractions with the same denominators | $\bigcirc$ | $\bigcirc$ |
| Solve problems that involve fractions | $\bigcirc$ | $\bigcirc$ |
| Vocabulary I need to know... |  |  |
| Fraction, decimal, decimal point, numerator, denominator, mixed fraction, simplify, compare, order, equivalent, convert, proper fraction, improper fraction, tenths |  |  |
| Resources I can use to help me |  |  |
| Fraction wall, squared paper, multilink |  |  |


| 5. What I will know about measurement | Start | End |
| :---: | :---: | :---: |
| Measure and compare: lengths (m/cm/mm); mass (kg/g); volume/capacity (1/ml) | $\bigcirc$ | $\bigcirc$ |
| Solve problems (+ and -): lengths (m/cm/mm); mass (kg/g); volume/capacity (1/ml) | $\bigcirc$ | $\bigcirc$ |
| Measure the perimeter of simple 2-D shapes | $\bigcirc$ | $\bigcirc$ |
| Add and subtract amounts of money to give change, using both $£$ and p in practical contexts | $\bigcirc$ | $\bigcirc$ |
| Tell and write the time from an analogue clock | $\bigcirc$ | $\bigcirc$ |
| Tell and write the time using Roman numerals from I to XII | $\bigcirc$ | $\bigcirc$ |
| Tell and write the time using 12-hour and 24-hour clock | $\bigcirc$ | $\bigcirc$ |
| Estimate and read time with increasing accuracy to the nearest minute | $\bigcirc$ | $\bigcirc$ |
| Record and compare time in terms of seconds, minutes and hours | $\bigcirc$ | $\bigcirc$ |
| Use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight | $\bigcirc$ | $\bigcirc$ |
| Know the number of seconds in a minute and the number of days in each month, year and leap year | $\bigcirc$ | $\bigcirc$ |
| Compare durations of events | $\bigcirc$ | $\bigcirc$ |
| Vocabulary I need to know... |  |  |
| Convert, milligrams, grams, kilograms, mile, millimetre, centimetre, metre, kilometre, seco hours, days, weeks, fortnight, months, years, decades, century, area, volume, angle, degre a.m./p.m., morning, afternoon, noon, midnight | minu cloc |  |
| Resources I can use to help me |  |  |
| Rulers, measuring tapes, measuring cylinders, scales, clocks, calendars |  |  |
| 6. What I will know about shape | Start | End |
| Draw 2-D shapes and make 3-D shapes using modelling materials | $\bigcirc$ | $\bigcirc$ |
| Recognise 3-D shapes in different orientations and describe them | $\bigcirc$ | $\bigcirc$ |
| Recognise angles as a property of shape or a description of a turn | $\bigcirc$ | $\bigcirc$ |
| Identify right angles | $\bigcirc$ | $\bigcirc$ |
| Know two right angles make a half-turn, three make three quarters of a turn and four a complete turn | $\bigcirc$ | $\bigcirc$ |
| Identify whether angles are greater than or less than a right angle | $\bigcirc$ | $\bigcirc$ |
| Identify horizontal and vertical lines | $\bigcirc$ | $\bigcirc$ |
| Identify pairs of perpendicular and parallel lines | $\bigcirc$ | $\bigcirc$ |
| Vocabulary I need to know... |  |  |
| Perpendicular, parallel, 2D, 3D, angle, turn, properties, right angle, horizontal, vertical |  |  |
| Resources I can use to help me |  |  |
| 2D shapes, 3D shapes, right angle checker |  |  |


| 7. What I will know about statistics | Start | End |
| :--- | :---: | :---: |
| Interpret data using bar charts, pictograms and tables | $\bigcirc$ | $\bigcirc$ |
| Present data using bar charts, pictograms and tables | $\bigcirc$ |  |
| Solve one-step questions using information presented in scaled bar charts and pictograms and <br> tables | $\bigcirc$ |  |
| Solve two-step questions using information presented in scaled bar charts and pictograms and <br> tables | $\bigcirc$ | $\bigcirc$ |
| Vocabulary I need to know... | $\bigcirc$ |  |
| Discrete, continuous, data, bar chart, graph, table, pictogram, key, symbol, x axis, y axis, scale |  |  |
| Resources I can use to help me |  |  |
| Rulers, multi-link |  |  |

