

A Parents' / Carers' Guide to Securing Y3 Maths

Counting (HTU only)

Take it in turns to count with your child. You may want to do this by throwing a ball to each other. Alternatively, get your child to write out the numbers on a piece of paper. Count up first. When this has been mastered, then count back.

- Start with any 3 digit number and count up and back in ones, taking care when crossing the 10s and 100s boundaries (e.g. 600, 310, 490 etc.).
- 10s (first from 0, then starting at another multiple of 10. e.g. from 80 to 350)
- 50s (first from 0, then starting at a multiple of 50 e.g. 350 – 1000)
- 100s (first from 0, then starting at a multiple e.g. 600 – 1000)
- 3s up to 36 and beyond. Then start on a multiple of 3 e.g. 18.
- 4s up to 48 and beyond. Then start on a multiple of 4 e.g. 16.
- Halves starting from 0 then a whole number e.g. 2 – 20)
- Quarters 0-5 (To also know that $4/4 =$ a whole.)
- Tenths 0-2 (to also know that $10/10 =$ a whole.)
- To recall number bonds to 10 (6 and 4 etc.), 20 (14 and 6 etc.) and 100 (in multiples of ten so 60 and 40 etc).

Place Value (HTU only)

- Read any 3 digit number written for them (numbers with 0 in will be trickier).
- Write any 3 digit number said to them (numbers with 0 in will be trickier).
- Use $<$ (less than), $>$ (more than), and $=$ (equals) to order 2 3 digit numbers (e.g. $234 < 468$ and $708 > 509$)
- Order a set of 5 3 digit numbers starting with the smallest.
- Say what each digit represents in a 3 digit number. (In 362 the 3 is worth 300, the 6 is worth 60 and the 2 is worth 2)
- Partition a 3 digit number ($362 = 300+60+2$).

Adding/subtraction

Can be done orally or written as a calculation on paper.

- To mentally add at least 3 single digits together
- On paper, to be able to add a string of single digits together by looking for bonds to tens and doubles.
- Add/subtract 10 to any 3 digit number (moving onto numbers such as 309 and 395 which are harder because the answer crosses the 10s or 100s boundary)
- Add/subtract 100 to any 3 digit number.
- Be able to add/subtract a single digit to any 3 digit number.

If the children have mastered adding/subtracting 1/10/100, they can move onto adding/subtracting 2, 20 or 200 etc.

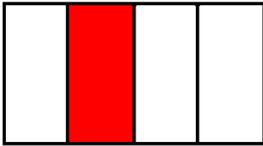
- Use partitioning to add 2 2 digit numbers together that **do not** cross the 10 boundary e.g. $62 + 24$ by adding 60 and 20 then 2 and 4.
- Use partitioning to add 2 2 digit numbers together that cross the 10 boundary e.g. $67 + 25$ by adding 60 and 20 then 7 and 5.
- Subtract a multiple of 10 from a 2 digit number ($62 - 30$).
- Subtract a 2 digit number from another 2 digit number by partitioning the smallest number only ($64 - 31$ is done by keeping 64 whole, subtracting 30 and then subtracting 1).

Multiplication and division

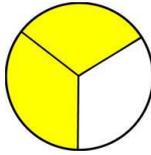
- Begin to recall facts in the 2,5,10,3 and 4 times table. Use fingers to answer these.
- Answer division question (by using fingers) e.g how many 3s in 18?

Fractions

- Be able to write a unit fraction (with 1 as numerator e.g. $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{3}$, $\frac{1}{10}$) moving on to writing non-unit fractions (e.g. $\frac{2}{3}$, $\frac{3}{5}$ etc.)
- Use counting to name first unit then non-unit fractions of circles and rectangles divided into equal parts where some of the parts have been shaded in.



$$\frac{1}{4}$$



$$\frac{2}{3}$$

- Know some fractions equivalent to half (moving onto quarters and tenths).

Doubling

- Doubling single digits.
- Double 2 digit number below 50 where the unit is below 5 e.g. 24, 32, 41 etc. by partitioning into tens and units and doubling the tens first, then doubling the units then add. (e.g double 24 is double 20, then double 4, then add the answers together).

Halving

- Start with halving even single digit numbers and teen even numbers.
- Move onto half of 20, 40, 60, 80, 100, then half of 26, 48, 64, 82 etc. then half of 30, 50, 70, 90

Measuring

- Know what units are used for measuring length (mm, cm, m, km), mass (weight g, kg), and capacity (ml, cl, litres).
- Know how many cm in a metre, half a metre and 3 metres.
- Know how many ml in a litre and g in a kg. Know how many ml in half a litre and g in half a kg.

Time

- Tell the time to the nearest 5 mins.
- Know how many minutes in an hour, $\frac{1}{2}$, $\frac{1}{4}$ and $\frac{3}{4}$ hour.
- Know there are 60 secs in a min.

Shape

- Know a right-angled turn is a quarter of a turn (relate to compass points).
- Know what a right angle is and recognise if an angle is bigger or smaller than a right angle.
- Name common 2d shapes (circle, semi-circle, oblong, square, rectangle, quadrilateral, pentagon, hexagon, octagon, decagon) and use sides, vertices, regular/irregular, lines of symmetry, horizontal and vertical and right angles to describe them.
- Name common 3d shapes (sphere, cone, cylinder, cube, cuboid, pyramids and prisms) and use faces (flat) curved surfaces, vertices, edges to describe them.
- Visualise the 3d shape from its net and describes the 2d shapes which make a net of a 3d shape.

Reasoning

Reasoning is an important part of maths. Children are expected to:

Use reasoning to solve problems and puzzles; follow their own lines of enquiry; work systematically; explain their thought processes and mathematical findings.

