

Calculation Policy

Year 5 Division

	Mental Strategies	Concrete	Pictorial	Abstract	Vocabulary	Models, Images and resources												
Year 5	Divide numbers mentally using known facts for all multiplication tables to 12 x 12 Divide whole numbers and decimals by 10, 100 or 1000, e.g. $25 \div 10$, $673 \div 100$, $74 \div 100$ Some examples using place value charts: Use a place value chart to work out $136 \div 1,000$ <table><tr><th>H</th><th>T</th><th>O</th><th>Tths</th><th>Hths</th><th>Thths</th></tr><tr><td>1</td><td>3</td><td>6</td><td></td><td></td><td></td></tr></table> Complete the calculation. $136 \div 1,000 = \square$	H	T	O	Tths	Hths	Thths	1	3	6				<u>Apply division facts for all multiplication tables in contexts of grouping and sharing – including remainders</u> See Y3 guidance - same principle <u>4 digit divided by 1 digit all 4 possibilities – moving to short division layout</u> Children should be confident enough to work in the abstract with this due . If needed, place value systems can still be used. $8,532 \div 2$ <u>Related Calculations</u> Division involving decimals $1.2 \div 3$	<u>Apply division facts for all multiplication tables in contexts of grouping and sharing – including remainders</u> See Y3 guidance - same principle <u>4 digit divided by 1 digit all 4 possibilities – moving to short division layout</u> Children should be confident enough to work in the abstract with this due. If needed, place value systems can still be used and drawings to represent the values <u>Related Calculations</u> Division involving decimals $1.2 \div 3$	<u>Apply division facts for all multiplication tables in contexts of grouping and sharing – including remainders</u> See Y3 guidance - same principle <u>4 digit divided by 1 digit all 4 possibilities – moving to short division layout</u> <u>Related Calculations</u> Division involving decimals $1.2 \div 3$	Divide Share equally, one each, two each..., Grouping equal groups, how many lots of, groups of... half of halved symbol $\div$ Remainder Left over Repeated subtraction dividend	100 square Number lines Number tracks Bead strings (for children) Bead bar Tens Frame Numicon Place Value Disks Cuisenaire Base hundreds tens and ones Arrow Cards Gattegno chart Place Value Grid
H	T	O	Tths	Hths	Thths													
1	3	6																

Find the whole number remainder after dividing a two-digit number by a single-digit number, e.g. $27 \div 4 = 6 \text{ R } 3$ Know the vocabulary for division equations see below: dividend $20 \div 4 = 5$ quotient divisor 5 ← quotient 4 20 divisor dividend dividend $\overline{20} = 5$ divisor → 4 quotient	Practise and extend efficient written methods applying X tables and related facts confidently for larger calculations. Divide up to Th HTO by O number using efficient short division Solve problems including scaling by simple fractions Use x and $\div$ as inverses to support dividing by powers of 10 in scale drawings or in converting units e.g km to m	divisor quotient a tenth of the size	
Useful IWB links for manipulatives	https://www.coolmath4kids.com/manipulatives/base-ten-blocks https://mathsbot.com/manipulatives/placeValueCounters https://mathsbot.com/manipulatives/bar https://classroomsecrets.co.uk/free-year-1-part-whole-model-iwb-addition-and-subtraction-activity/ https://www.nctm.org/Classroom-Resources/Illuminations/Interactives/Ten-Frame/ http://www.ictgames.com/mobilePage/tenFrame/index.html		