MULTIPLICATION AND DIVISION POLICY

Holy Trinity & St John's CEP School

St Johns Road

Margate

Kent

CT9 1LU

Telephone: 01843 223237

Reviewed and ratified at

Full Governors Meeting: January 2023

Email: office@htsj.school

Web Site: www.holytrinitymargate.co.uk

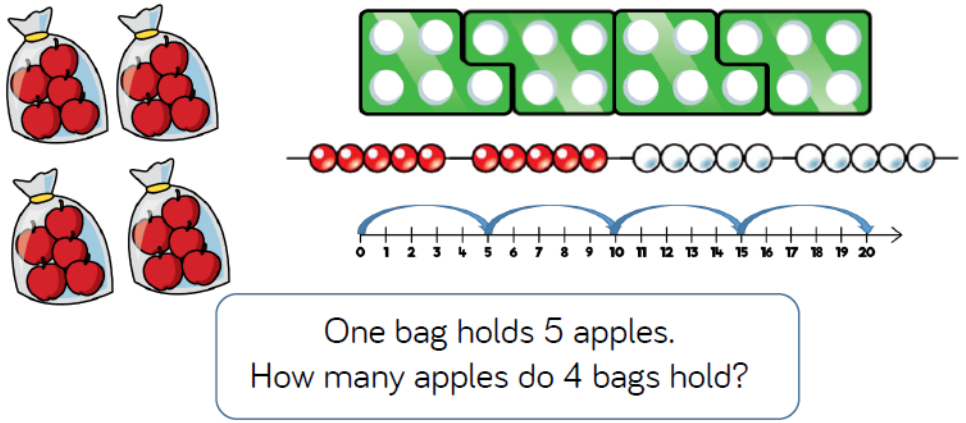
Through our lives we will have HOPE and aspiration for ourselves and our community, we will come to know and BELIEVE that God loves us and wants the very best for us because we are uniquely and wonderfully made and that we will fulfil our God-given gifts in order that we might ACHIEVE and enjoy life in all its fullness.

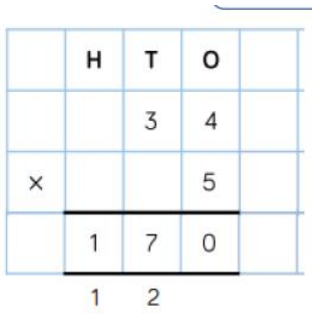
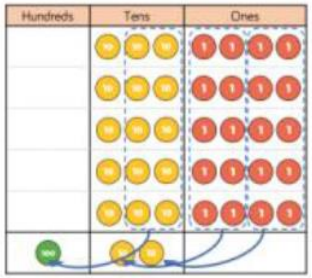
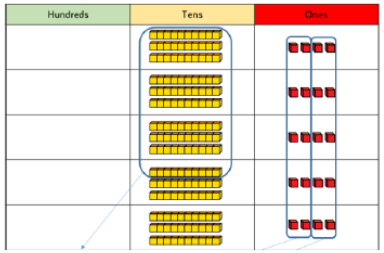
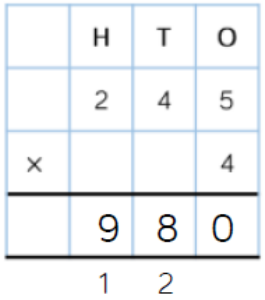
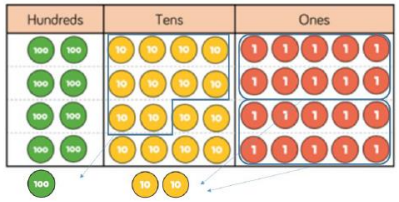
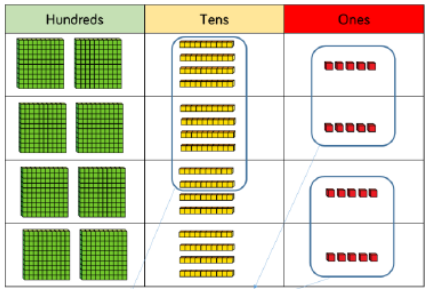
HOPE | BELIEVE | ACHIEVE

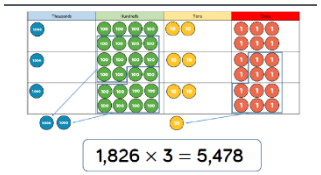
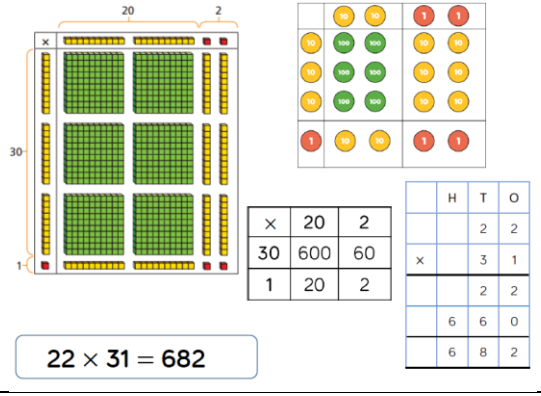
To develop confident, curious, independent, resilient life-long learners within a Christian environment

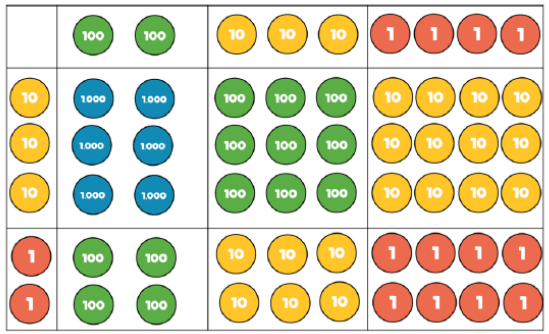
Trust | Friendship | Hope | Compassion | Respect | Forgiveness

Multiplication and Division

Year Group	National Curriculum Links/skills	Representations and models	Manipulatives	Vocabulary
1	In Year 1, children use concrete and pictorial representations to solve problems. They are not expected to record multiplication formally. (solve 1-step problems using multiplication)		Numicon Tens Frame Number lines Bead strings Everyday objects	How many times? Lots of Groups of Multiple of Multiply by Repeated addition Array, row and column. Group in
2	In Year 2, children are introduced to the multiplication symbol. (solve 1-step problems using multiplication)		Everyday objects Numicon Bead Strings Number line Tens Frame	How many times? Lots of Groups of Multiple of Multiply by Repeated addition Array, row and column. Group in

3	Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods	  	Place Value counters Base 10	Product Scale up Multiples
4	3-digit by 1-digit multiplication, encourage children to move towards the short, formal written method.	  	Base 10 Place value counters	Inverse Product Facts up to 12x12

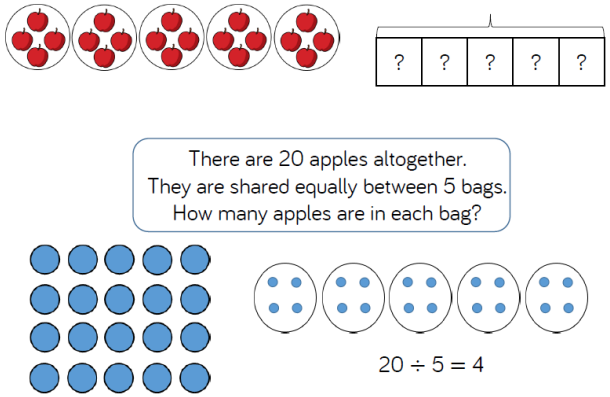
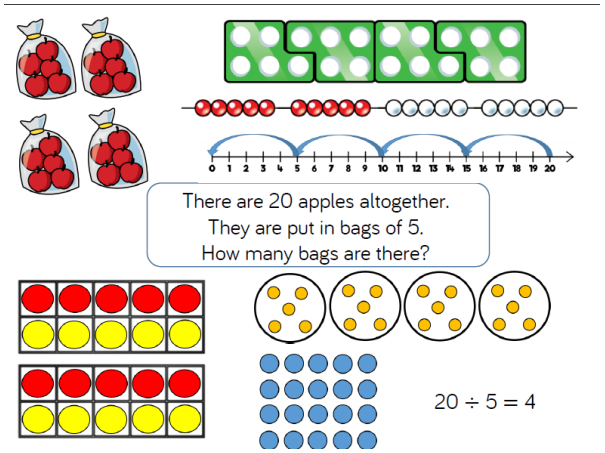
5	Multiply 4 digit numbers by 1 digit numbers.	 1,826 × 3 = 5,478  **Exchanging to below the two lines.**	Base ten Place value counters	Factor pairs Prime number Square numbers Cubed numbers Formal written method
	Multiply 2 digit by 2 digit.	 22 × 31 = 682	Base ten Place value counters	

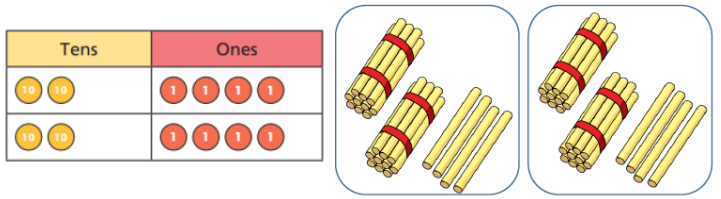
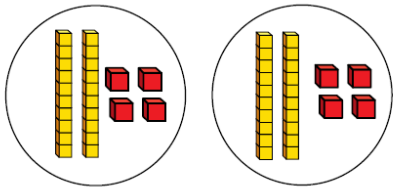
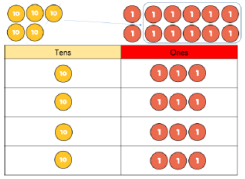
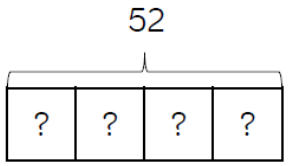
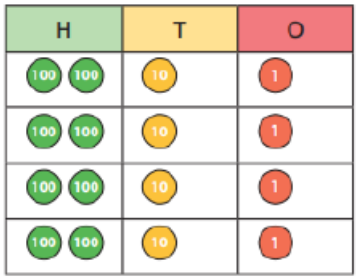
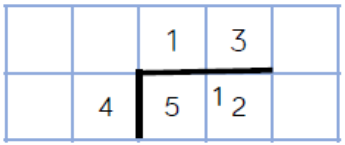
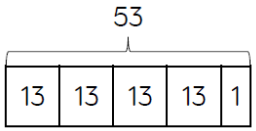
	Multiply by 3 digit by 2 digits.	 **234 × 32 = 7,488**	Base ten Place value counters	
6	Multiply 4 digit numbers by 2 digit numbers.		Base ten and Place Value counters as needed.	Common factors Common multiples Factor pairs

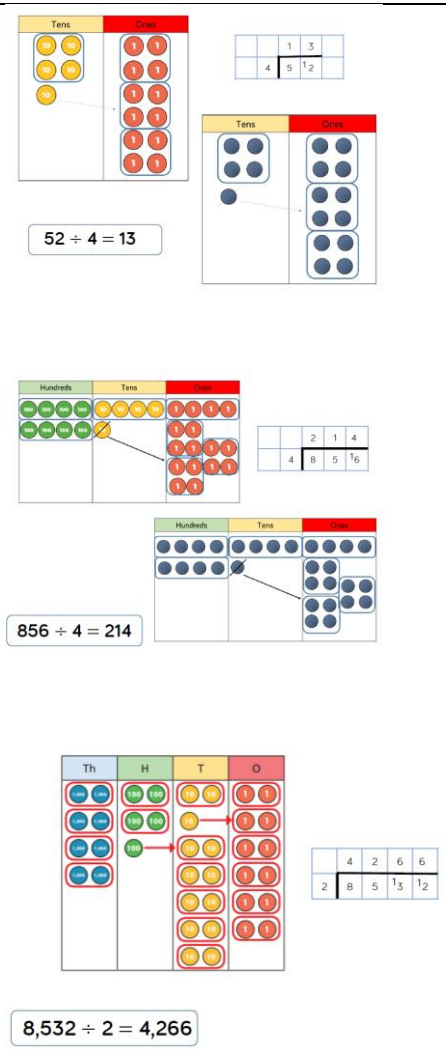
Th	H	T	O
	2	3	4
×		3	2
	4	6	8
$^{1}7$	$^{1}0$	2	0
7	4	8	8

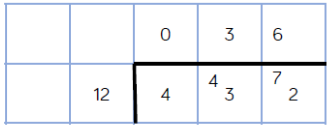
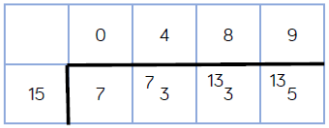
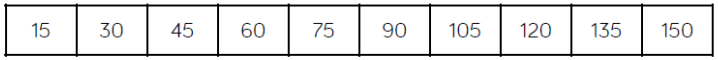
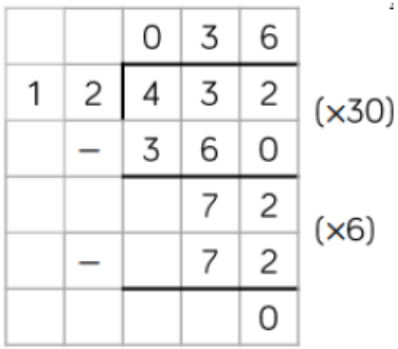
×	200	30	4
30	6,000	900	120
2	400	60	8

Th	H	T	O
	2	3	4
×		3	2
	4	6	8
$^{1}7$	$^{1}0$	2	0
7	4	8	8

Year Group	National Curriculum Links/skills	Representations and models	Manipulatives	Vocabulary
1	Solve 1 step problems multiplication – sharing and grouping.	Sharing  Grouping 	Everyday objects Counters Bar Model arrays Numicon Tens Frame Bead String	Divided by Sharing Grouping
2	Solve 1- step problems using division.		Everyday objects Counters Bar Model arrays Numicon Tens Frame Bead String	Divided by Sharing Grouping

3	Divide 2 digits by 1 digit. Sharing	Sharing   + Number line	Straws Base Ten Place Value Counters Number line	Divide Sharing Grouping
4	Divide 2 digits by 1 digit – with exchange and remainder.	**52 ÷ 4 = 13**    **53 ÷ 4 = 13 r1**    	Place Value Counters	Sharing Grouping Divide Division facts Inverse Remainder

5	Divide 2 digit by 1 digit – grouping. Divide 3 digit by 1 digit- grouping. Divide 4 digit by 1 digit – grouping.		Place Value counters	Divide Share Group

6	Divide multi digits by 2 digits- short division Divide multi digits by 2 digits – long division.	 $432 \div 12 = 36$ $7{,}335 \div 15 = 489$    	Number tracks	Divide