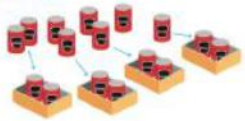
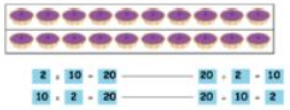
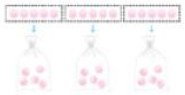
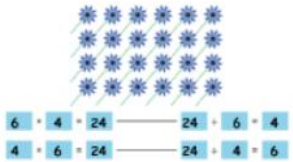
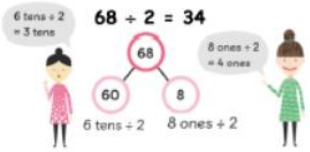
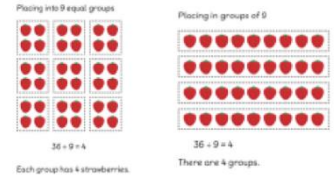
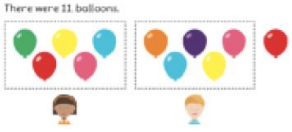
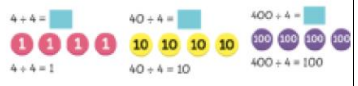
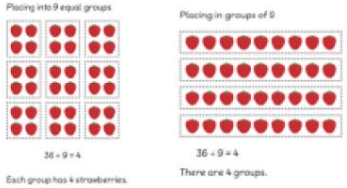
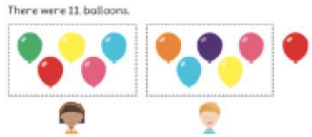
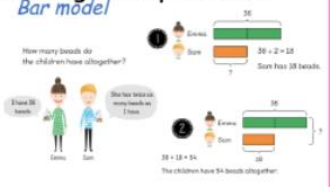
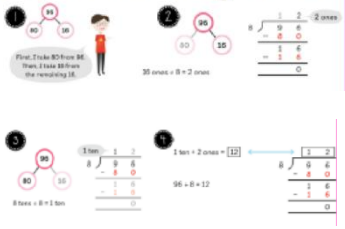
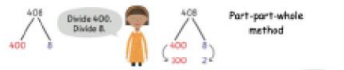
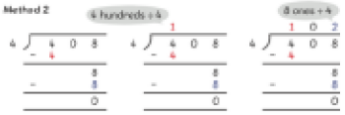
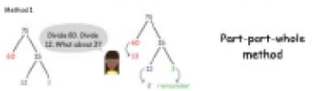
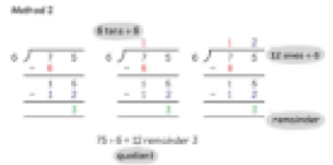
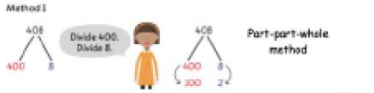
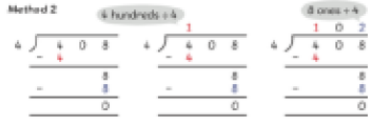
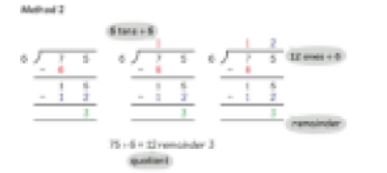
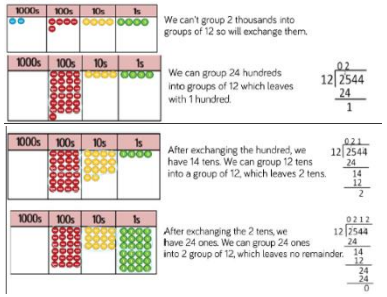
Calculation Policy: Division

Year 1	Year 2	Year 3	Year 4	Year 5 / 6
Sharing equally There are 6 cookies and 3 children. Each child takes one cookie.  Each child takes one more cookie.  Each child gets 2 cookies. **Grouping equally** There are 8 cans.  There are 4 boxes of 2 cans.	**Make a family of multiplication and division facts:**  2 x 10 = 20 — 20 ÷ 2 = 10 10 x 2 = 20 — 20 ÷ 10 = 2 **Solving Problems** Ruby has 15 marshmallows. She packs 5 marshmallows into each bag. How many bags does Ruby need? Method 1 Use  to stand for . Use  for each bag.  Ruby has 15 marshmallows. She packs 5 marshmallows into each bag. How many bags does Ruby need? Method 2 Draw a picture.  Ruby has 15 marshmallows. She packs 5 marshmallows into each bag. How many bags does Ruby need? Method 3 Use a division equation. 15 ÷ 5 = 3 Ruby needs 3 bags.	**Grouping: 'groups of'** Put 8 into groups of 4.  8 ÷ 4 = 2 2 plates are needed. **Grouping: 'equal groups'** Put 8 into 4 equal groups.  8 ÷ 2 = 4 4 trays are needed. **Make a family of multiplication and division facts:**  6 x 4 = 24 — 24 ÷ 6 = 4 4 x 6 = 24 — 24 ÷ 4 = 6 **Number bond strategy:** Division  6 tens ÷ 2 = 3 tens 68 ÷ 2 = 34 68 60 8 8 ones ÷ 2 = 4 ones 6 tens ÷ 2 8 ones ÷ 2	**Division by grouping:**  Placing into 9 equal groups 36 ÷ 9 = 4 Each group has 4 strawberries. Placing in groups of 9 36 ÷ 9 = 4 There are 4 groups. **Grouping with remainders:**  There were 11 balloons. 11 ÷ 2 = 5 remainder 1 The quotient is 5 and the remainder is 1. Each friend got 5 balloons. There was 1 balloon left over. **Divide using multiplication:** 24 ÷ 3 = 8 3 x 8 = 24 **Dividing by 1, 10 and 100:**  4 ÷ 4 = ☐ 4 ÷ 4 = 1 40 ÷ 4 = ☐ 40 ÷ 4 = 10 400 ÷ 4 = ☐ 400 ÷ 4 = 100	**Division by grouping:**  Placing into 9 equal groups 36 ÷ 9 = 4 Each group has 4 strawberries. Placing in groups of 9 36 ÷ 9 = 4 There are 4 groups. **Grouping with remainders:**  There were 11 balloons. 11 ÷ 2 = 5 remainder 1 The quotient is 5 and the remainder is 1. Each friend got 5 balloons. There was 1 balloon left over. **Divide using multiplication:** 24 ÷ 3 = 8 3 x 8 = 24

		Dividing *with renaming* 4 ⟌ 64 = 16 − 40 (10 × 4) 24 − 24 (6 × 4) 0 64 = 40 + 24 **Solving word problems:** *Bar model*  **Number bond and long division:** 	**Divide without remainders:**  Part-part-whole method **Long division**  **Divide with remainders:**  Part-part-whole method **Long division** 	**Divide without remainders:**  Part-part-whole method **Long division**  **Divide with remainders:**  Part-part-whole method **Long division**  **Long division** using place value counters 2544 ÷ 12  We can't group 2 thousands into groups of 12 so will exchange them. We can group 24 hundreds into groups of 12 which leaves with 1 hundred. After exchanging the hundred, we have 14 tens. We can group 12 tens into a group of 12, which leaves 2 tens. After exchanging the 2 tens, we have 24 ones. We can group 24 ones into 2 group of 12, which leaves no remainder.