# Maths Challenges Summer Term 2019-2020
## Week 6

| Focus | Challenge 1 | Challenge 2 | Challenge 3 |
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| **Division**<br><br>**To develop confidence with sharing and grouping tasks** | • Share an even number of items (up to 20) between 2 people. Put equal numbers of items on 2 plates, saying '1 for me, 1 for you' as you do this to ensure an even count. Identify what half the total is<br><br>• When you are confident with practical halving, try sharing items (divisible by 4) between 4 plates and identify what a quarter is<br><br>• Collect an even number of items (up to 20) and work out how many 'plates/bags of 2 or 4' you can make using all the items<br><br>• Use a calculator to find half or quarter of an even total by dividing by 2 or 4.<br><br>• Throw a ball to a member of your family to practise learning halves to 10 (or 20) by rote (eg Your partner throws the ball and says 'half of 10', you throw back and say '5' etc)<br><br>• Make up some word problems (eg How many marbles would I receive if I shared 18 between myself and a family member? What is a quarter of a box of 12 cookies?) | • Select an even number of items (up to 30) and share them between 2 or 4 people. First, estimate how many items you think each person will receive<br><br>• Practise grouping activities by making sets of 2 and 4 with up to 30 household items - eg collect 16 toys and work out how many 'bags of 4 toys' can be filled<br><br>• Use the term 'remainder' for any items that do not make a complete set<br><br>• Show some of your practical division work as written calculations using the division and equals signs ('r' can be used for the remainder if needed)<br><br>• Use a calculator to find half or quarter of a total by dividing by 2 or 4. Notice that the remainder is shown as a decimal.<br><br>• Throw a ball to a member of your family to practise halves and quarters by rote (eg Your partner throws the ball and says ' a quarter of 12', you throw back and say '3' etc)<br><br>• Make up some word problems (eg If my cousin is 20 years old, what's half his age?) | • Select an even number within 100/ 1000 and work out what a half and a quarter of that number will be, then check using a calculator.<br><br>• Practise grouping activities by making sets of 3, 4 and 5 with household items - eg collect 30 utensils and work out how many 'sets of 3, 4 or 5' can be made from this total<br><br>• Write division statements to show your practical work, showing the remainder as a decimal as needed<br><br>• Throw a ball to a member of your family to practise halves thirds, quarters etc by rote (eg Your partner throws the ball and says ' a quarter of 120', you throw back and say '30' etc)<br><br>• Make up some word problems (eg If my auntie is 30 years old, what's half her age? My brother is a quarter of the age of my 60 year old grandma, how old is he?)<br><br>• Find a till receipt and work out what the total would be if all items were 'half price'<br><br>• Work out a '25% off' discount, by first dividing the total by 4 to find a quarter and then subtracting a quarter from the total<br><br>• Work out a '10% off' discount, by first dividing the total by 10 to find a tenth and then subtracting a tenth from the total |