

Maths Challenges Summer Term 2019-2020

Week 10

Focus	Challenge 1	Challenge 2	Challenge 3
<p>Time</p> <p>To develop confidence with analogue and digital times</p>	<ul style="list-style-type: none"> • Draw clock faces showing o'clock times. Jumble these up and re-order (Remember 12 o'clock could be noon or midnight). Write a digital time to match the analogue clocks • When confident ordering o'clock times, extend to half past-draw 12 half past times, put in order and add the digital time to each • Make an 'edible clock' by using 12 slices of banana or 12 sultanas to represent the numbers and bread or carrot sticks for the hands • Use the 'two clock method' to work out differences between (hour) times (eg a shop opens at 9am and closes at 3pm-how many hours was it open?) Set the first clock to show 9am and the second 3pm, then count the number of hours that need to be added to Clock 1, so it matches Clock 2 (When confident, extend to half hours, eg from 10.30 am to 2:30pm) • Look at different timing devices you may have at home, eg kitchen timer, mobile phone timer. Investigate what you can do 'in a minute'-eg how many times can you run around your garden? Kick or throw a ball to a family member? etc 	<ul style="list-style-type: none"> • Make a floor-clock by writing numbers 1-12 on sheets of paper and arranging in a circle. Use one large and one small stick to make the clock hands. Initially make times to 15 minute intervals, then extend to 5 minutes when you are confident with this • Count on and back in units of time - eg 1:00, 1.15, 1:30, 1:45/ half past two, two o'clock, half past one.... (When you are confident with quarter hours extend to 5 minute intervals) • Recall time facts by heart, eg How many seconds in a minute, minutes in an hour and hours in a day? • Look at different types of calendar, eg a wall calendar and a mobile phone calendar. How many days are there in a week, weekend, month or year? Can you find key occasions on the calendar? Can you work out differences between dates, eg how long is it until....? • Work out time intervals (eg length of a cooking time /TV programme) using the 'two clock method' • Think of some estimation problems- firstly 'guess' how long you think it will take to complete a task (eg eat your dinner/ wash up), then time the activity. Can you work out the difference between your estimate and the recorded time? 	<ul style="list-style-type: none"> • Read any given analogue or digital clock times to the nearest minute • Practise converting 12 hour and 24 hour clock times • Think of some estimation problems and ask family members to 'guess' before looking up facts to check, eg how long do you think it takes to travel to London on the train? Fly to Australia? • Find/download different timetables and work out how long it would take to make a journey by bus or train. You may find it useful to use the blank 'time-line' method to help calculate time differences: Write down the start time in digital form, draw a line across your page and then write the end time. First work out how many hours between the two times (showing your working out above the line), then count the minutes • Make an analogue clock face using Roman Numerals instead of digits to 12. You could even make an 'edible' clock, forming the Roman Numerals from bread or carrot sticks • Recall date facts by heart, eg How many days are there in a fortnight, month or year? How many years in a decade, century, millennium? • Use a calendar to answer time problems, eg What dates in August would be suitable for a 2 day visit to my friend? (He works Monday-Friday and is away on holiday from 15th-29th August)