Event	Date	Problem	Content Domain Ref	Answers
Passover	27th March - 4th April	Passover Plagues	6A3 6A4	A sequence of moves is shown here: http://britton.disted.camosun.bc.ca/frog_puzzle_sol.htm
Earth Day	22nd April	Recycling Facts	5C8b 5F10 6C7c 6C8 6R2	1. Answer depends on the number of children in the class, if there are 30 children, then 27/30. 2. 8 x 3 = 24 hours 3. ¼ of 6,000 = 1,500 gallons 4. 55% of 20 = 11kg 5. 16% of £1.25 = 20p 6. 100 people = 3,800kg newspaper = 3.8 tonnes. 24 x 3.8 = 91.2 trees = 92 trees 7. 1,200,000 per year = 100,000 per month = 25,000 per week = 3,571 per day
St George's Day	23rd April	Flag Fun	3G2 4G2b 5G4a 5G4c	Answers will depend on flags chosen for each question.
Shakespeare's birthday	23rd April	Rectangle Riddle	4G2a	48

Event	Date	Problem	Content Domain Ref	Answers
London Marathon	Usually April but this year October 2021	Race Results	3M4f 4F7 5M4 5S1 6S3	1. 3 minutes and 30 seconds 2. 6 minutes and 25 seconds 3. 16 minutes 4. 340 minutes ÷ 5 = 68 minutes = 1 hour and 8 minutes 5. 787 minutes ÷ 5 = 157.4 minutes = 2 hours and 37 minutes 6. 42 ÷ 5 = 8.4 8.4 x 25 = 210 minutes = 3 hours 30 minutes
Dance Day	29th April	Dance Dilemma	5C8a	23 people
National Share a Story Month	1st – 31st May	Informative Illustrations	Depends on topics chosen	N/A

Event	Date	Problem	Content Domain Ref	Answers
Red Cross Appeal Week	6th – 12th May	Hosting a HumaniTea	5C8b 5F10 5M9a 6C6 6R1	N/A
National Sun Awareness Week	3rd - 9th May	Sunscreen Statistics	5M4 6C6 6R2	1. 20 x 60 = 1200 seconds 2. 2 x 12 = 24 months 3. $\frac{40}{60} = \frac{2}{3}$ of an hour 4. 80% of 60 = 48 people 5. 15 x 30 = 450 minutes = 7 hours 30 minutes
Europe Day	9th May	Code Cracker	6C6	To make war between Europe's nations unthinkable.

Event	Date	Problem	Content Domain Ref	Answers
Florence Nightingale's birthday	12th May	Letter Sort	3G2 4G2a 4G2b 4G4	Sorting criteria could include: • Vowels • Lines of symmetry • Rotational symmetry • Right angles • Acute angles • Parallel lines • Position in the alphabet
Aid Week	10th - 16th May	Challenge	6M9	Both classes collected the same amount.
FA Cup Final	15th May	Football Fractions	6F2 6F4 6F6	N/A
FA Cup Final (2)	15th May	Average Analysis	4S2 5S1 6S3	1. 37 goals 2. Tottenham (9 goals) 3. Chelsea and Middlesborough 4. Tottenham v Milwall 5. Huddersfield v Manchester City 6. Mean: 37 ÷ 26 = 1.4 Mode: 0 Median: 1

Event	Date	Problem	Content Domain Ref	Answers
Vesak	26th May	Vesak kuudu	5M7b 5G2b 5G4c 5P2 6M7b 6G2a 6G3a 6G3b	Pupils answers should prove that they can use their knowledge of shape properties and angles to draw accurate squares and triangles, using a ruler and protractor. Ensure they can create symmetrical designs.
Walk to School Week	17th – 21st May	Magic Maths	6C6 6F11 6R2 6A1	If x = friend's age, y = today's date and z = friend's shoe size, then: 1. x 2. 20x 3. 20x + y 4. 100x + 5y 5. 100x + 5y + z 6. 100x + z
Local and community History Month	1st – 31st May	Tricky Timelines	3M4f 4M4c 5C4	1. September 1939 2. 21 months = 1 year and 9 months

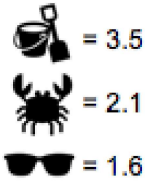
Event	Date	Problem	Content Domain Ref	Answers
Ramadan	12th April - 12th May	Fasting Times	5M4 6C8 6F10	1a. 30 days 1b. 04:45 - 21:15 = 16.5 hours per day 2a. 16.5 x 7 = 115.5 hours per week 2b. 16.5 x 30 = 495 hours during Ramadan 3. 1 day 115.5 ÷ 24 = 4.8125 = 5 days 495 ÷ 24 = 20.625 = 21 days
Pride Month	1st June - 30th June	A Cake Sale to be Proud of!	3S2 6S1	1. £25 2. £20 3. £120 4. N/A

Event	Date	Problem	Content Domain Ref	Answers
Child Safety Week	7th - 13th June	Accident Arithmetic	5M4 6C7b 6F9c 6R2	1. 30,000 ÷ 12 = 2,500 children each month 2. 130,000 ÷ 52 = 2,500 children each week 3. 1,000,000 ÷ 12 = 83,333.33… = 83,333 children each month 4. 39% of 1,000,000 = 390,000 children
Bike Week	30th may - 5th June	Distance Dilemma	5M9b	Anjali 11:40am Sam 11:24am
Children's Art Week	29th June - 19th July	Line Art	4P3a	N/A
Queen's Official Birthday	12th June	Digit Dilemmas	5N2 5N4 5N6 5C1	1. 9621, 1269 2. 196 3. 24 (See Q4) 4. 1269, 1296, 1629, 1692, 1926, 1962, 2169, 2196, 2619, 2691, 2916, 2961, 6129, 6192, 6219, 6291, 6912, 6921, 9126, 9162, 9216, 9261, 9612, 9621 5. 61+ 29 = 90 or 21 + 69 = 90 6. 162, 169, 192, 196, 216 and 219
Food Safety Week	14th - 20th June	Pie Chart Problems	6R2 6S1	1. 32% of 450,000 = 144, 000 2. Other foodborne bacteria = 28% of 6000 = 1680\ Campylobacter + Salmonella = 6000 – 1680 = 4320 4320 – 1680 = 2640 3. (29% of 6000) – (8% of 500) = 1740 – 40 = 1700 4. 43% of 6000 = 2580 2580 x 12 = 30,960

Event	Date	Problem	Content Domain Ref	Answers
Eid Ul Fitr	12th - 13th May	Recipe Ratios	6R4	12 people: 1350g pumpkin 1650ml milk 3 teaspoons cardamom seeds, crushed 3 tablespoons sultanas 84g unsalted butter 345g sugar 126g flaked almonds 6 people: 675g pumpkin 825ml milk 1.5 teaspoons cardamom seeds, crushed 1.5 tablespoons sultanas 42g unsalted butter 172.5g sugar 63g flaked almonds 9 people: 1012.5g pumpkin 1237.5ml milk 2.25 teaspoons cardamom seeds, crushed 2.25 tablespoons sultanas 63g unsalted butter 258.75g sugar 94.5g flaked almonds

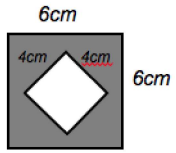
Event	Date	Problem	Content Domain Ref	Answers
Refugee Week	15th - 21st June	Merchandise Maths	5M9a 6F10 6R2 6A5 6S3	1. £30 + (2 x £10) + (1.5 x £2.50) + (30 x £2.50) = £128.75 2. 2 grey t-shirts + 2 badges or 1 grey t-shirt + 6 badges 3. 1/4 4. 1/12 5. White t-shirt £25.50 Grey t-shirt £8.50 Balloons £2.13 Badge £2.13 6. £11.25
Blaise Pascal's Birthday	19th June	Pascal's triangle	5S2 6S1 6S3	1. Each number is the sum of the two numbers directly above it. 2. 1 5 10 10 5 1 1 6 15 20 15 6 1 1 7 21 35 35 21 7 1 1 8 28 56 70 56 28 8 1 3. They double. 4. Children might notice: the symmetry of the triangle, the 2nd diagonal of counting numbers, the third diagonal of triangular numbers etc.

Event	Date	Problem	Content Domain Ref	Answers
First Day of Summer	21st June	Sunrise and Sunset Statistics	3M4f 5M4	J: 8h 37m = 517m F: 10h 24m = 624m M: 12h 14m = 734m A: 14h 15m = 855m M: 15h 54m = 954m J: 16h 38m = 998m J: 15h 55m = 955m A: 14h 14m = 854m S: 12h 15m = 735m O: 10h 19m = 619m N: 8h 34m = 514m D: 7h 49m = 469m
National School Sport Week	19th - 25th June	Sports Day Data	5M5 5M9b	Ali won (Jo 157cm, Ali 308cm, Mark 258cm, Pippa 169cm, Mauro 279cm, Evie 249cm, Timo 196cm, Jack 254cm, Amelia 271cm, Shane 256cm)
Wimbledon	28th June - 11th July	Court Calculations	4M7a 5M7b 5M9b 6M7c	1. 10.973 – 8.23 = 2.743m 2. (23.77 x 2) + (10.973 x 2) = 69.486 3. 11 x 24 = 264m2 4. 264 – (24 x 8) = 72m2 Challenge: 66

Event	Date	Problem	Content Domain Ref	Answers
American Independence Day	4th July	Fireworks Fun	4N1 6A4	6
Tour de France	26th June - 18th July	Cycling Calculations	5M9b 6M6	1. 2082 x 1.6 = 3331km 2. 2. 2082 ÷ 21 = 99 miles 3. 198 x 2082 = 412,236 miles 4. 2082 ÷ 25 = 83.3 hours = 3 days, 11 hours and 20 minutes
Armed Forces Day	26th June	Training Timetable	5M9a	1. 45 minutes 2. 1 hour 45 minutes 3. 15 minutes more 4. 4 hours 15 minutes 5. 14:00 6. 2,700 seconds 7. 1/6
Holiday Maths Week	July	Ice-cream Combinations	6A5	There are 6 combinations
Holiday Maths Week	July	Seaside Logic Puzzle	5F10	The missing total is 7.2 
Holiday Maths Week	July	Design	5M9a	N/A

Event	Extension ideas
Passover	Repeat the exercise for: • 4 frogs in each family with 9 lily pads • 5 frogs in each family with 11 lily pads • 6 frogs in each family with 13 lily pads Can children see a pattern? Can they use the pattern to work out how many jumps would be needed for 8 frogs in each family on 17 lily pads? Write a general statement which explains how to work out the number of jumps (j) if you know the number of frogs (f).
Earth Day	• Children write their own problems based on the facts given. • Carry out a class recycling survey to find out how much rubbish they recycle each day. The rubbish could be categorised and weighed, then data can be presented appropriately. • Class recycling data can be used to calculate energy/ water saved.
St. George's Day	• Create own flags that meet certain criteria, e.g. 2 lines of symmetry, ¼ red and 4 equilateral triangles
Shakespeare's birthday	• Repeat the activity for a different part of the house. • Look at the number of shapes on sections of other buildings (e.g. triangles on The Louvre or rhombuses on The Gherkin). • The activity could be extended to calculating angles and lengths.
London Marathon	• Plan a marathon route in the nearest town. • Estimate how long it would take them to run a marathon, perhaps by running a set distance and timing how long it takes, then multiplying up. • Create graphs of race results, e.g. nationalities of runners, 2016 compared to 2017.

Event	Extension ideas
Dance Day	• Dance activities based on shape, symmetry and direction.
National Share a Story Day	• Look at shapes and angles in book illustrations. • Make comic books where the pictures have to be made from 2D shapes.
Red Cross Appeal Week	• Do a similar activity based on different ways of raising money, e.g. sponsored cycle, quiz night, parachute jump, danceathon.
National Sun Awareness Week	• To be safe in the sun you need to put sunscreen on every 2 hours between 10am and 4pm. You should use 2 teaspoons for your face and 2 tablespoons for the rest of your body. How many days will a 250ml bottle of sunscreen last? (1 tsp = 5ml, 1 tbsp = 15ml)
Europe Day	• Children create their own code crackers with messages for their friends to decipher.
Vesak	• Calculate the area and perimeter of shapes drawn. • What is the area of the shaded part of the shape? • Record some angles on a picture of a Vesak kuudu. • Can children calculate the missing angles?



Event	Extension ideas
Florence Nightingale's birthday	• Use Venn and Carroll diagrams for other sorting activities. • Try sorting the letters using a 3 circle Venn diagram
Walk to School Week	• Children try the trick out on people at home. • More maths tricks can be found here: https://www.easycalculation.com/funny/tricks/trick1.php http://www.murderousmaths.co.uk/games/seven.htm http://www.sumssimple.com/maths-magic-numbers_01.html
Local and Community History Month	• Create a timeline based on local history and write questions to go with it. • Look at events taking place locally and make links to maths. • Look at timelines with a range of different scales.
FA Cup Final	• Children could create their own football fractions board game.
FA Cup Final	• Look at how adding data from more recent rounds affects the averages. • Look at statistics on players in these teams and present data effectively. • Look at links: Is there a link between average age of players and goals scored, for example?

Event	Extension ideas
Child Safety Week	• For Q1, 2 and 3 calculate the number of accidents per day. • Produce a bar graph to show the data in Qs 1, 2 and 4. • Find out how child accident rates in the UK compare to another country and present the data appropriately.
Bike Week	• Repeat the question with different speeds/ distances. • Calculate the speed they both travelled in miles per hour. • Work out how long it would take each of them to travel 15km. • The circumference of a bike wheel is 60cm. How many times would it turn on a 1km journey?
Children's Art Week	• Investigate probability: What is the probability that each colour will be selected? How many lines did you draw in total? How many would you expect to be (choose one of the 6 colours used)? What is the probability that a line would start at (3,3)?
Queen's Official Birthday	• The queen will be 92 this year. How many number sentences can the children write with an answer of 90? Encourage them to use fractions, decimals and % as an extra challenge.
Food Safety Week	• Produce a bar graph showing the data in the pie charts. • Research cases of food poisoning each year since 2010 and produce a line graph.
Eid Ul Fitr	• Plan an Eid feast for 6 people by finding suitable recipes and rewriting them for 6 people. • Calculate the cost of the food required.
Refugee Week	• Give children a quantity of money to spend in the shop and ask them to record the different ways they could spend it. • If someone pays for items costing £12.50, how many different ways could they pay the exact price using coins and notes?

Event	Extension ideas
Blaise Pascal's Birthday	• Investigate Fibonacci numbers or triangular numbers.
First Day of Summer	• Calculate between which two months there is the biggest change in daylight length. • Find out the sunrise and sunset times for today- how many hours of daylight will there be? • Produce a line graph showing sunrise and sunset times. Use it to predict sunrise and sunset times on the 1st day of each month.
National School Sport Week	• Order the children according to their position in the competition. • Write each distance jumped in m, cm and mm. • Calculate the average distance jumped. • Calculate the total distance jumped by all 10 children. What is this in km? Miles? • If each child jumped 5% further on their second jump, how far did they jump? • Hold a class sporting competition. and record results to work out who won.
Wimbledon	• Choose rectangles on the diagram and calculate their areas and perimeters. • Investigate the triangle formed at the bottom right of the court- perimeter, area, angles etc. • How do the area and perimeter of a tennis court compare to those of other courts, e.g. netball, badminton, squash?
American Independence Day	• If hotel costs were reduced by 15%, how much would the family save on their break? • How far away is Paris? What is the cost per kilometre of the flight? • What is the average cost of the break per person?
Tour de France	• If an amateur cyclist travels at 15 mph, how much longer would it take them to complete the Tour de France circuit than a professional cyclist?

Event	Extension ideas
Holiday Maths Week 1	• What would happen if you could have more than one scoop of each flavour? • Repeat the activity for 4 scoops of ice-cream. • Is there a way to work this out without recording all the combinations?
Holiday Maths Week 2	• Children to produce their own version of this puzzle for a friend to solve.
Holiday Maths Week 3	• 1f 1 square = 10m2 calculate the area given to each item (e.g. large rides). • Give children running costs for each item. How much would it cost to run their theme park for 1 day?