# Maths Through the Year: Record of activities

**Spring 2020 (First half)**

| Year | Event | Date | Name of Activity | Mathematics Topics |
|---|---|---|---|---|
| Reception | RSPB Big Schools' Birdwatch<br><br>RSPB Big Garden Birdwatch | 6th January – 21st February<br><br>25th – 27th January | Shape owl | Shape, space and measures |
| 1 | Brain Teaser Month<br><br>International Puzzle Day | January<br><br>29th January | Linking shapes | Geometry – properties of shapes |
| 2 | World Day of the Snowman | 18th January | Symmetrical snowman | Geometry – properties of shapes |
| 3 | Brain Teaser Month<br><br>International Puzzle Day | January<br><br>29th January | KenKen | Number – addition and subtraction<br>Number – multiplication and division |
| 4 | Brain Teaser Month<br><br>Backwards Day | January<br><br>31st January | Clocks in the mirror | Measurement |
| 5 | RSPB Big Schools' Birdwatch<br><br>RSPB Big Garden Birdwatch | 6th January – 21st February<br><br>25th – 27th January | Order the birds | Number – number and place value |
| 6 | Brain Teaser Month<br><br>International Puzzle Day | January<br><br>29th January | Logic puzzle | Use reasoning and logical thinking skills |

To download more free activities and find out how Busy Ant Maths can support your school, visit collins.co.uk/BusyAntMaths

# Shape owl

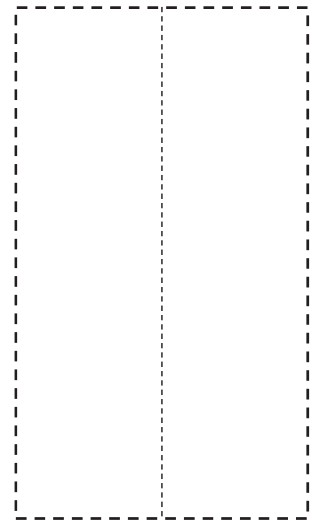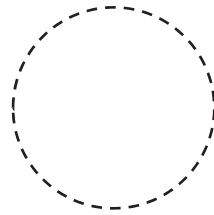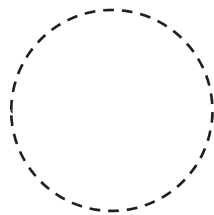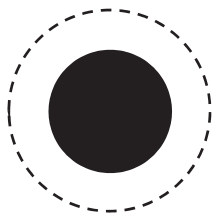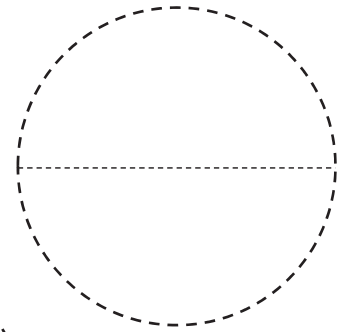We're celebrating the RSPB Big Schools' Birdwatch and Big Garden Birdwatch!
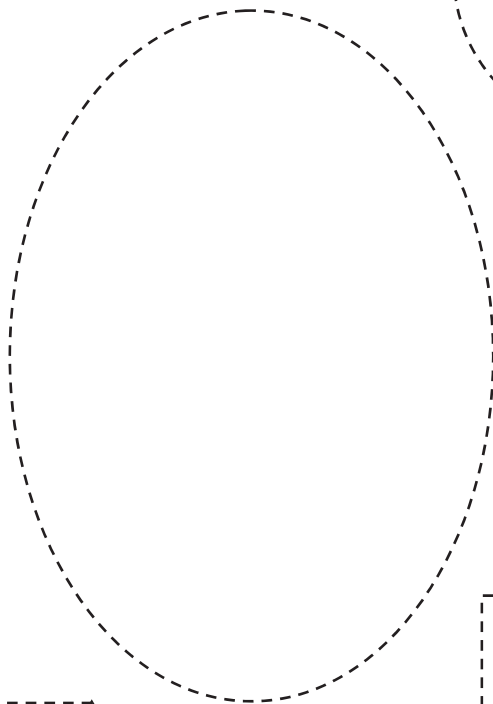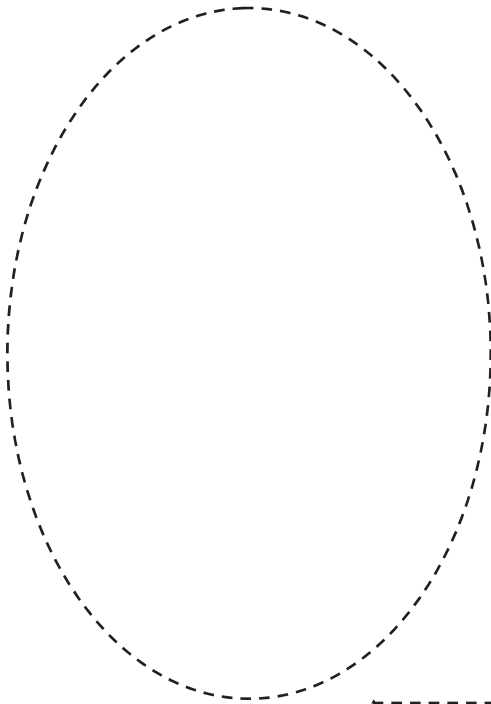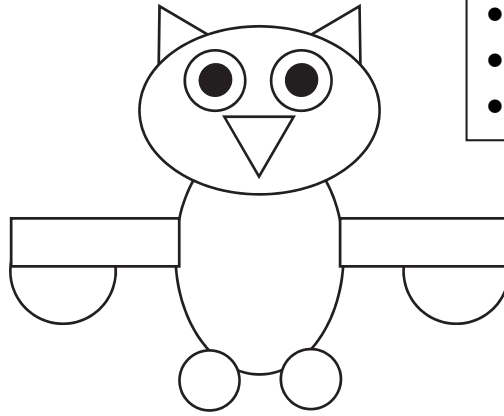
Cut out the shapes below.
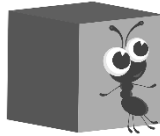Arrange and glue the shapes onto the sheet of paper to make this owl.
Then colour your owl.

**You will need:**
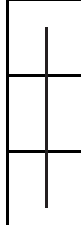
- scissors
- sheet of paper
- glue
- coloured pencils
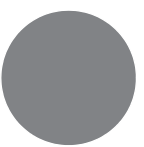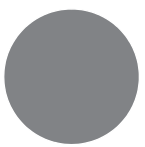
collins.co.uk/BusyAntMaths

# Linking shapes

We're celebrating Brain Teaser Month and International Puzzle Day!

Draw lines going side to side and up and down

through the squares to connect matching shapes.

All squares on the grid must have one line passing through it.

Line cannot cross or go corner to corner.

The stars have already been matched.

# Linking shapes
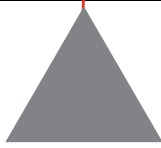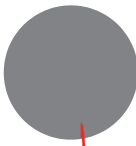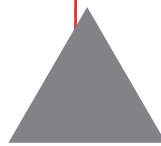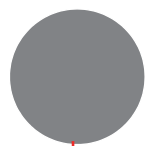
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# Symmetrical snowman

We're celebrating World Day of the Snowman!

Use the grid to complete the drawing of a symmetrical snowman.

Then, using coloured pencils colour the snowman, making sure that he is still symmetrical along the vertical line of symmetry.

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# KenKen

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Complete each puzzle by writing a digit from 1 to 4 in each square in the grid.

Each digit can be used only once in each row and column.

A target number and operator is given for each block with a bold black outline.

For example, 10 + means the target number is 10 and the operator is +, so the digits in that block must add up to 10.

### Puzzle 1

| 8 + | | 3 – | 8 x |
| | 7 + | | **4** |
| **3** | | | |
| 5 + | | 6 x | 2 – |
| | | | |

### Puzzle 2

| 4 + | 2 ÷ | 2 – | 7 + |
| | | **2** | |
| 8 x | 4 + | 9 + | |
| | | | **1** |
| | | | |

### Puzzle 3

| 3 x | **1** | 10 + | |
| 2 – | | | 1 – |
| 7 + | | | **3** |
| 2 ÷ | | 4 + | |

### Puzzle 4

| 2 ÷ | | 3 x | |
| 6 + | | 7 + | 12 x |
| | | | **4** |
| **2** | | | |
| 7 + | | 1 – | |

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## Puzzle 1

| | | | |
|---|---|---|---|
| 8 +   2 | 3 | 3 −   1 | 8 x   **4** |
| **3** | 7 +   1 | 4 | 2 |
| 5 +   4 | 2 | 6 x   3 | 2 −   1 |
| 1 | 4 | 2 | 3 |

## Puzzle 2

| | | | |
|---|---|---|---|
| 4 +   1 | 2 ÷   4 | 2 −   3 | 7 +   2 |
| 3 | **2** | 1 | 4 |
| 8 x   4 | 4 +   3 | 9 +   2 | **1** |
| 2 | 1 | 4 | 3 |

## Puzzle 3

| | | | |
|---|---|---|---|
| 3 x   3 | **1** | 10 +   2 | 4 |
| 2 −   1 | 3 | 4 | 1 −   2 |
| 7 +   2 | 4 | 1 | **3** |
| 2 ÷   4 | 2 | 4 +   3 | 1 |

## Puzzle 4

| | | | |
|---|---|---|---|
| 2 ÷   4 | 2 | 3 x   3 | 1 |
| 6 +   1 | 3 | 7 +   2 | 12 x   **4** |
| **2** | 1 | 4 | 3 |
| 7 +   3 | 4 | 1 −   1 | 2 |

# Order the birds

We're celebrating the RSPB Big Schools' Birdwatch and Big Garden Birdwatch!

Look at these facts about some of the most common birds in the UK.

| Bird | Average weight (grams) | Average wingspan (cm) | Estimated UK population (pairs) |
|---|---|---|---|
| Blackbird | 125 | 36 | 5.1 million |
| Blue tit | 12.5 | 18 | 3.6 million |
| Chaffinch | 29 | 27 | 6.2 million |
| Great tit | 22 | 23 | 2.5 million |
| House sparrow | 38 | 21 | 5.3 million |
| Robin | 21 | 21 | 6.7 million |
| Woodpigeon | 614 | 78 | 5.4 million |

Order the birds, starting with the lightest bird.

Order the birds, starting with the bird with the longest average wingspan.

Order the birds, starting with the bird with the largest UK population.

Write statements comparing the weights, wingspans and populations of the most common birds in the UK.

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Order the birds, starting with the lightest bird.

*Blue tit, Robin, Great tit, Chaffinch, House sparrow, Blackbird, Woodpigeon*

Order the birds, starting with the bird with the longest average wingspan.

*Woodpigeon, Blackbird, Chaffinch, Great tit, (House sparrow, Robin), Blue tit*

Order the birds, starting with the bird with the largest UK population.

*Robin, Chaffinch, Woodpigeon, House sparrow, Blackbird, Blue tit, Great tit*

Write statements comparing the weights, wingspans and populations of the most common birds in the UK.

*Pupil's statements will vary.*

# Logic puzzle

We're celebrating Brain Teaser Month and International Puzzle Day!

Ava, Liam, Mia, Elijah and Sophia go to a restaurant to eat.

Each person chooses a different main course, dessert and drink.

The main courses they choose are:
- fish and chips
- chicken salad
- hamburger
- vegetable curry
- pizza

The desserts they choose are:
- lemon tart
- chocolate brownie
- cheesecake
- ice cream
- apple crumble

The drinks they choose are:
- apple juice
- cola
- lemonade
- orange fizz
- orange juice

Using the clues and the table below, work out which main course, dessert and drink each person has.

1. Mia has lemonade. She does not have cheesecake. The person who has the cheesecake also has the chicken salad.
2. The person who has the hamburger has cola to drink.
3. Elijah has the chocolate brownie and Ava has the pizza. Both Elijah and Ava have fruit juice.
4. The person who has apple crumble for dessert has cola to drink, and it is not Sophia.
5. The person who has fish and chips drinks apple juice.
6. The person who has lemonade does not have the lemon tart.

| Person | Main course | Dessert | Drink |
|---|---|---|---|
| *Mia* | | | *lemonade* |
| | | | |
| | | | |
| | | | |
| | | | |

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| Person | Main course | Dessert | Drink |
|--------|-------------|---------|-------|
| Mia | vegetable curry | ice cream | lemonade |
| Sophia | chicken salad | cheesecake | orange fizz |
| Elijah | fish and chips | chocolate brownie | apple juice |
| Ava | pizza | lemon tart | orange juice |
| Liam | hamburger | apple crumble | cola |