Year 3

1) Reading comprehension. Read the news article below and answer the questions.



## Why Are Dogs' Noses So Cold?

Why are dogs' noses so cold? Scientists think and Charlie. All the dogs were trained to find they've got the answer! It's all about sensing heat.

Have you ever felt a dog's nose? It probably was quite cold and wet! Now, scientists think they know why.

For a while, people thought it was cold to keep the dog cool. However, scientists in Sweden and Hungary think they've found a different answer.

Their new study said that dogs' cold noses allow them to spot heat from far away.

The tip of a dog's nose has a whopping 100 million nerve endings! That's a lot more than humans. It's why dogs have a great sense of smell.

It also helps them spot things giving off a small amount of heat. This is great for hunting small mammals!

Scientists from Lund University and Eotvos Lorand University worked together. They wanted to find out whether dogs' noses could sense heat.

They worked with three dogs: Kelvin, Delfi

the warmest of three identical objects.

Humans couldn't tell without touching them but the dogs could! They found the warmest of three objects using their nose. In fact, they could tell from 1.5 metres away!

Dogs' noses are a different temperature to the place they're in. Scientists think it's this difference which allows them to spot heat.

Who 'nose' what scientists will find next!

#### Glossary

study An investigation into

something.

mammals A warm-blooded animal that

has live young.

nerve Tiny wire-like parts of the

body which sense things and share information.

identical Exactly the same or similar in

every detail.

# Questions

|    |            | The tip of a dog's nose has a <b>whopping</b> 100 million nerve endings!'<br>Fick the word which is closest in meaning to 'whopping' in this sentence.   |
|----|------------|--|
|    | (          | O enormous   |
|    | (          | ) important  |
|    | (          | ) more   |
|    | (          | ) small  |
|    | 2. F       | Find the names of the two universities the scientists worked at.   |
|    | 1          | L  |
|    | 2          |  |
|    |            | Which of these is <b>not</b> the name of a dog scientists worked with?   |
|    | (          | Charlie  |
|    | (          | O Delfi  |
|    | (          | ) Lorand   |
|    | (          | Company Compan |
|    |            | However, scientists in Sweden and Hungary think they've found a different answer.'<br>This suggests that   |
|    | (          | O Dogs' noses are really important.  |
|    | (          | Everyone believes the same thing.  |
|    | (          | These scientists agree with other people.  |
|    | (          | These scientists have discovered something new about dogs' noses.  |
| 5. | Fin        | d a sentence which suggests scientists will carry on learning new things.  |
| 6. | Tic        | k the headline which best summarises this news story.  |
|    | 0          | Dogs' Noses Are Great  |
|    | 0          | Dogs' Cold Noses Help Them Sense Heat  |
|    | 0          | Scientists Don't Know The Answer   |
|    | $\bigcirc$ | Scientists Discover New Dog  |

- 2) Write your own newspaper article! Write a newspaper article based on a story of your choice. Try to include
  - a catchy headline
  - an introduction paragraph
  - details using conjunctions (because, so, but, when, if, that)
  - adverbs
  - adjectives
  - reported speech (A quote from a person about the news. You will need to use speech marks.)

You could use the BBC Newsround website if you need help with ideas about what to write about.

| <ol><li>Draw your own spring scene and writuse prepositions, adjectives, adverbs an</li></ol> |  |
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### 4) Fantastic Fantasy

| Write your own fantasy story. Think about the setting, characters and plot. It's fantasy so it can be as wild, creative and imaginative as you like! |  |  |  |  |  |
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**5)** Spellings. Practise your spellings and ask an adult to test you at the end of the week.

| Look,       | Look, LOOK, Say, | Sover,    | write, [  | check     |           |
|-------------|------------------|-----------|-----------|-----------|-----------|
| Weekly      | Write and        | Write and | Write and | Write and | Write and |
| spellings   | check            | check     | check     | check     | check     |
| famous      |                  |           |           |           |           |
| jealous     |                  |           |           |           |           |
| dangerous   |                  |           |           |           |           |
| enormous    |                  |           |           |           |           |
| poisonous   |                  |           |           |           |           |
| tremendous  |                  |           |           |           |           |
| mountainous |                  |           |           |           |           |
| humorous    |                  |           |           |           |           |
| outrageous  |                  |           |           |           |           |
| courageous  |                  |           |           |           |           |

6) Read, read, read! Please continue to read lots at home. Read a range of books and

|      |           |          | ou questioi    | ns about      | what        | you          | have        | read          | SO | that | you | can |
|------|-----------|----------|----------------|---------------|-------------|--------------|-------------|---------------|----|------|-----|-----|
| Snow | your your | understa | naing.         |               |             |              |             |               |    |      |     |     |
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|      |           |          | <u>Science</u> | <u>Home l</u> | <u>earn</u> | <u>ing \</u> | <u>Weel</u> | <u>&lt; 2</u> |    |      |     |     |

#### 1) Strong and weak light

weakest light

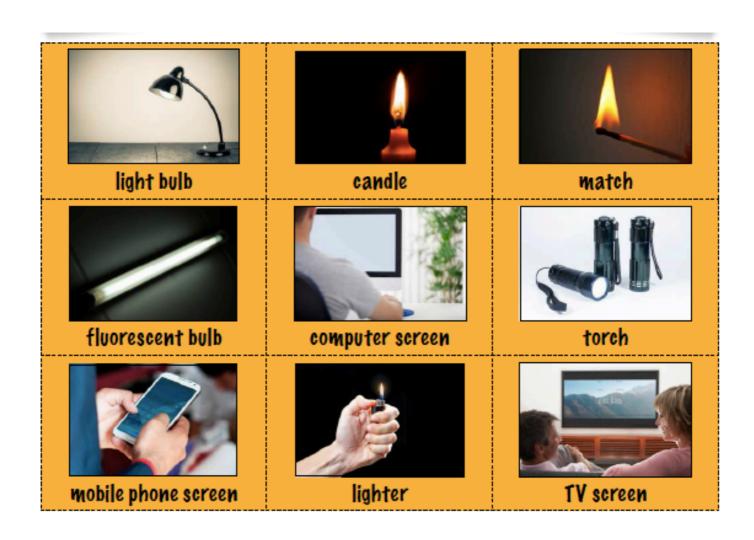
Imagine you were in a room that was completely dark. If you used each of the light sources on the Picture Cards, which would make the room lightest? Put the light sources in order from what you think would produce the strongest light to what would produce the weakest light.



How could you test if your predictions were right?

How would you make the test fair?

Now compare your predictions to someone else's. Did you choose the same order? Discuss any differences you have.



2) Test your predictions and record the results of your investigation in a table.

|                       | Photograph F | Frame Design |  |
|-----------------------|--------------|--------------|--|
| Front view:           |              | Back view:   |  |
| Materials:            |              | Tools:       |  |
| How will it stand up? | How will you | decorate it? | How will you take the photograph in and out? |

1) Strong structures. Design your own photograph frame. Think back to the ones we

studied in class for inspiration.

#### 1) Family diversity

Make a spider diagram to brainstorm what family means to you and what it means to other people. Think about different types of family, extended family, friends and community members. Think about what family means to different people in different circumstances and cultures.

1) Examples of tessellation can be found in floor tiles, mosaics, honeycomb, bricks in a wall, reptile scales, chess boards etc. Produce your own piece of tessellation artwork. Make a template of a shape and draw around it. Repeat this fitting the shapes next to each other. Simple shapes will be easier and complex shapes and pictures will be harder. Use Maurits Escher's work or the world around you for inspiration!







#### How can I use this with my children?

Encourage your child to learn their times tables with these fun maths games. A range of ideas are described, from dominoes and colour by times table to games that don't need any equipment.

#### How does this help my children's learning?

This resource contains an excellent selection of games and activities designed to encourage your child to learn their tables, while having fun. Suitable for all learners from year 2 upwards.

#### Ideas for further learning:

Roll two dice and count up according to the number rolled, for example if 6 and 3 are rolled, count up in 9s, if 4 and 3 are rolled, count up in 7s. Keep practising to improve your child's speed.



## Games Ideas

#### Fizz Buzz

Choose 'fizz' for multiples of a number (e.g. 3), and 'buzz' for multiples of another number (e.g. 5). Starting with 1, players take it in turns to say the next number. However, each time a multiple of 3 or 5 is reached, the player must say 'fizz' or 'buzz' instead of the number. If the number is a multiple of both 3 and 5, the player must say 'fizzbuzz'.

For example: one, two, fizz, four, buzz, seven, eight, fizz, buzz, eleven, fizz, thirteen, fourteen, fizzbuzz

You could try other multiples or adding another multiple for a more complex game.

#### **Times Table Tennis**

Choose a times table to focus on. Take it in turns to say the next number in the times table sequence. You could pretend to serve and pass a tennis ball between you or use a real one.

#### **Times Table Corners**

Label different areas/corners of your garden with 2, 5 and 10. Shout out a number. If the number is a multiple of 2, 5 or 10, your child must go to the matching area.

#### **Fastest Times Tables Facts**

Choose a times table to focus on and have a competition to see who can write down the times tables facts the fastest. You can decide whether to write the number sentences out in full (e.g.  $1 \times 2 = 2$ ,  $2 \times 2 = 4$ ,  $3 \times 2 = 6$ ) or just the numbers (e.g. 2, 4, 6).

#### Times Tables Snap and Matching Cards

Create a set of cards with separate times table facts and answers. Challenge your child to find the matching cards in a game of snap. Alternatively, place the cards face down and take it in turns to turn over two cards. If the cards match, the player keeps the cards. If the don't match, turn the cards back over and the next player takes their turn.





# **Multiplication Dice Game**

#### How to play:

- 1. Roll a dice.
- 2. Multiply your answer by 2 or 3.
- 3. Colour you answer on the grid.
- 4. The first person to colour 3 in α row wins!

| 2  | 18 | 6  | 3 |
|----|----|----|---|
| 4  | 10 | 12 | 4 |
| 8  | 6  | 2  | 8 |
| 12 | 9  | 15 | 3 |



# **Multiplication Dice Game**

#### How to play:

- 1. Roll a pair of dice.
- 2. Multiply your 2 numbers.
- 3. Colour you answer on the grid.
- 4. The first person to colour 4 in α row wins!

| 18 | 12 | 24 | 8  | 10 | 24 | 6  | 15 |
|----|----|----|----|----|----|----|----|
| 36 | 30 | 12 | 9  | 2  | 5  | 4  | 18 |
| 4  | 24 | 4  | 8  | 6  | 8  | 15 | 3  |
| 10 | 12 | 25 | 15 | 20 | 6  | 16 | 8  |
| 36 | 12 | 12 | 30 | 5  | 12 | 5  | 30 |
| 10 | 25 | 1  | 9  | 5  | 6  | 10 | 20 |
| 18 | 20 | 9  | 10 | 16 | 15 | 4  | 3  |
| 1  | 30 | 4  | 20 | 2  | 3  | 6  | 15 |





# **Multiplication Dice Game**

#### How to play:

- 1. Roll a pair of dice.
- 2. Multiply the number by 2 and remember your answer.
- 3. Roll 1 die again and take away the number from your answer. If the final answer is below zero, then re-roll the 2 dice.
- 4. Colour your answer on the grid.
- 5. The first person to colour 5 in a row wins!

| 18 | 12 | 24 | 8  | 10 | 24 | 6  | 15 |
|----|----|----|----|----|----|----|----|
| 36 | 30 | 12 | 9  | 2  | 5  | 4  | 18 |
| 4  | 24 | 4  | 8  | 6  | 8  | 15 | 3  |
| 10 | 12 | 25 | 15 | 20 | 6  | 16 | 8  |
| 36 | 12 | 12 | 30 | 5  | 12 | 5  | 30 |
| 10 | 25 | 1  | 9  | 5  | 6  | 10 | 20 |
| 18 | 20 | 9  | 10 | 16 | 15 | 4  | 3  |
| 1  | 30 | 4  | 20 | 2  | 3  | 6  | 15 |





## Mixed 3, 4 and 8 Times Table Dominoes

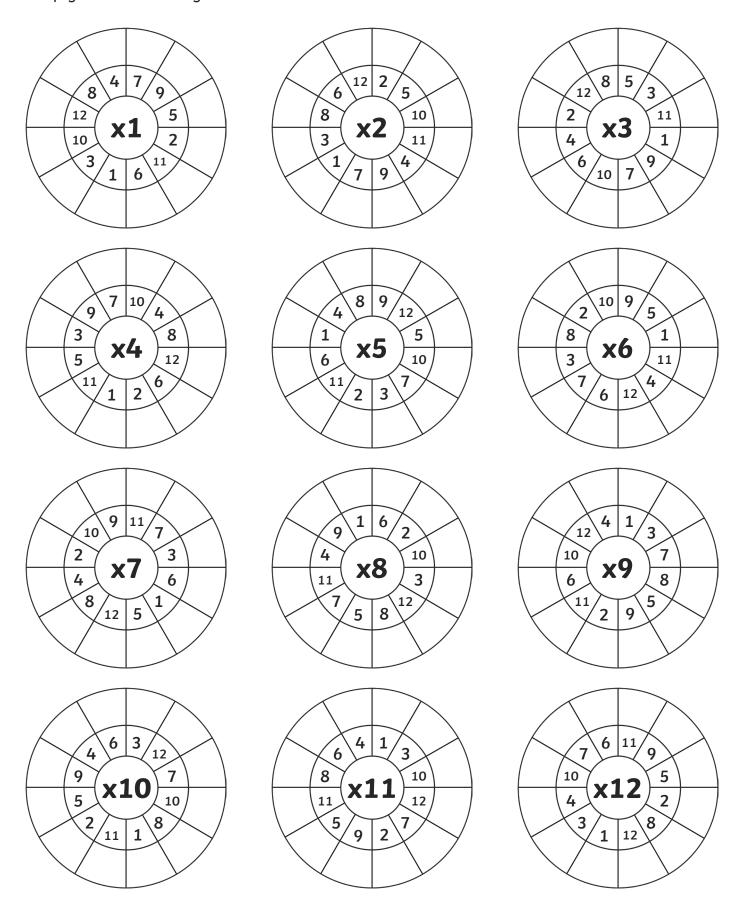
Share the dominoes cards out equally between the players. Take it in turns to add a matching domino card to the cards in play. The first player to get rid of all their dominoes is the winner.

| twinkl | Page  | Page 5 of 8 |     |  |
|--------|-------|-------------|-----|--|
| 8      | 3 × 3 | 24          | 2×4 |  |
| 18     | 3×8   | 20          | 6×3 |  |
| 8      | 5×4   | 6           | 1×8 |  |
| 36     | 2×3   | 64          | 9×4 |  |

| 30 | 8×8                | 44 | 10×3 |
|----|--------------------|----|------|
| 40 | 11×4<br>twinkl.com | 21 | 5×8  |
| 48 | 7×3                | 16 | 12×4 |
| 33 | 2×8                | 9  | 11×3 |

# **Multiplication Wheels**

Multiply the numbers by the middle number.





# Colour by Multiplication

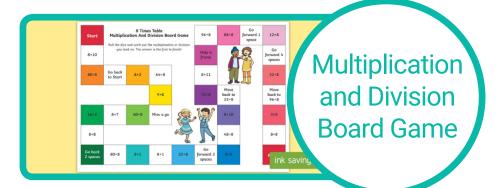
Do the multiplication calculation and colour the shape in the correct colour.

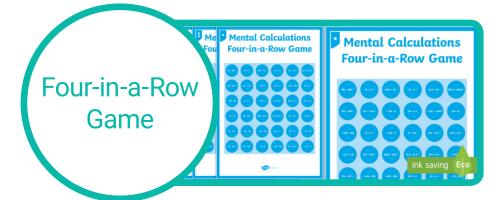
21-30 0 - 1011-20 31-40 41-50 51-60 61-70 light blue purple pink yellow dark blue green orange 6 x 8  $3 \times 3$ 5 x 8 9 x 3 2 x 6 7 x 4 5 x 3 8 x 7 6 x 9  $2 \times 2$ 2x73 x 3 9 x 2 5 x 2 4 x 3 6 x 3 2 x 6 4 x 9 10 x 2 6 x 6 4 x 4 5 x 7 4 x 9 6 x 8 2 x 6 7 x 7 8 x 8 6 x 6  $5 \times 3$ 3 x 3 7 x 3 4 x 7 2 x 6 5 x 8 7 x 8  $2 \times 8$ 4 x 4 9 x 2 4 x 3 5 x 9 5 x 6 2 x 4 4 x 5 7 x 3 4 x 6 4 x 8



If you enjoyed this resource, why not try...





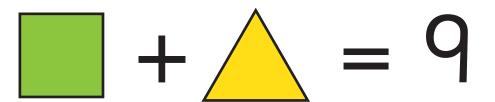




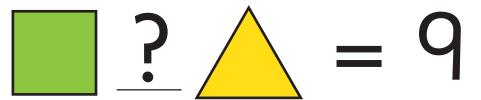
If you need us, just get in touch - contact twinklcares@twinkl.co.uk visit twinkl.com/parents





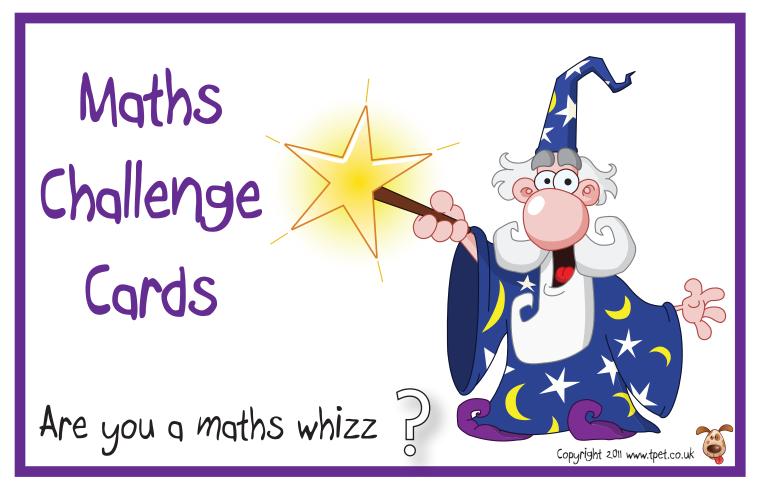


★ What could the 2 missing numbers be? List all the possibilities.



★ What could the calculation be? List all the possibilities.

Year 3





★ I have 20p in my purse.

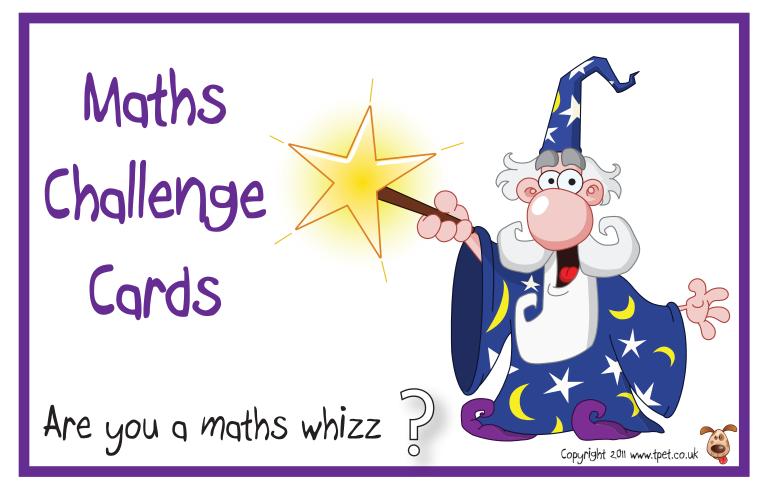
What coins could I have?

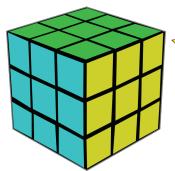
Make a list of all the possibilities.

→ Jill has 50p in her purse.
 What coins could she have?
 Make a list of all the possibilities using only these coins:









- ★How many faces does a cube have?
- What is special about the faces of a cube?
- True or False? A cuboid has the same number of faces as a cube.

Year 3

## Real-life Maths

Small pizzas cost: £4.20, £4.40, £4.50, £3.80, £4.25

Big Pizzas cost: £5.50, £5.75, £6.00, £4.95, £5.40

Which two pizzas can you buy for exactly £10.00?



Year 3

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Year 3

## Real-life Maths

You have £5. Some toys are priced £2.70, £1.80, £1.40, £1.60, £2.20 and £1.20.

Investigate which three you could buy.

## Real-life Maths

Two rolls of tape are 35 cm and 41 cm long.

What is their total length?

What is the difference in their lengths?

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Year 3

## Real-life Maths

An egg weighs about 50 grams.

Roughly how much would 6 eggs weigh?

## Real-life Maths

A big potato weighs about 1/4 kg on the scales.

Roughly, what would be the weight on the scales of 10 big potatoes?

## Real-life Maths

A bottle of medicine holds 35 millilitres.

A teaspoon holds 5 millilitres.

How many teaspoons of medicine are in the bottle?



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Year 3

## Year 3 Mental Maths (Block 1)

Listen carefully to each question. I will read each question twice before you write your answer.

## 5 second response time

- 1. Write in figures the number 69.
- 2. Write the missing number: (64 = ? + 4). (60)
- 3. What number is halfway between 9 and 13? (11)
- 4. What is the nearest 10 to 33? (30)
- 5. How many corners has a triangle? (3)
- 6. Five add three add two. (10)
- 7. Twelve take away four. (8)
- 8. What is 2 times 5? (10)
- 9. Divide 6 by 3. (2)
- 10. How many centimetres are there in 1 metre? (100)

## 10 second response time

- 11. Look at the scale on your sheet. Estimate the number shown by the arrow. (13)
- 12. I have £14. I am given another £9. How much do I have now? (£23)
- 13. How many days are there in the month of December? (31)
- 14. Frank buys a T-shirt for £5.99 and a pair of socks for £1.99. How much do they cost altogether? (£7.98)
- 15. On your sheet is a pattern of numbers. What is the next number in the pattern? (23)



Test 1

| 1. |          | 9.  |              |                |
|----|----------|-----|--------------|----------------|
| 2. | 64 = + 4 | 10. | C            | m              |
| 3. | 9 13     | 11. | 10 +         | 16             |
| 4. |          | 12. | £            | £14<br>£ 9     |
| 5. |          | 13. |              |                |
| 6. |          | 14. |              | £5.99<br>£1.99 |
| 7. |          | 15. | 3 7 11 15 19 |                |
| 8. |          |     |              |                |

## Year 3 Mental Maths (Block 1)

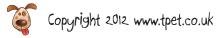
Listen carefully to each question. I will read each question twice before you write your answer.

### 5 second response time

- 1. What number is shown by the arrow on the number line? (75)
- 2. On your sheet is part of a 100 square. Fill in the missing number. (25)
- 3. Write a number that is between 17 and 21. (18, 19 or 20)
- 4. Round 16 to the nearest 10. (20)
- 5. How many right angles are there in a square? (4)
- 6. Four plus six. (10)
- 7. Take six from eighteen. (12)
- 8. Double 16. (32)
- 9. Share 18 sweets between 2 children. (9)
- 10. How many pence in £1.50? (150)

### 10 second response time

- 11. A pear costs 15p more than an apple. An apple costs 12p. What does a pear cost? (27)
- 12. How many squares can you count on the diagram? (6)
- 13. Look at the clock. What time does it show? (3:30 or half past 3)
- 14. What is double the sum of 18 and 12? (60)
- 15. Draw the next shape in the sequence. (\_\_\_)



| Name: |    |    | Date: |       |                         |
|-------|----|----|-------|-------|-------------------------|
| 1.    |    |    | 9.    |       | 18 sweets<br>2 children |
| 2.    | 15 |    | 10.   | р     | £1.50                   |
| 3.    | 26 | 17 | 11.   | р     | 15p<br>12p              |
| 4.    |    | 21 | 12.   |       |                         |
| 5.    |    |    | 13.   | 11 12 | 2 3-                    |
| 6.    |    |    |       | 7 6   | 4.//                    |
| 7.    |    |    | 14.   |       | 18 2                    |
| 8.    |    |    | 15.   |       |                         |

### Geography

We are going to use your knowledge of maps and map making. Think back to the maps we have made of Alresford, Highcliffe and the map we made of the school field!

- Can you draw a map of your house or your back garden?
- Think about how it would look from a bird's eye view (imagining if you were a bird looking down on it).
- Add in landmarks like trees, your shed, and paths.
- Colour it in with the correct colours to make it look as accurate as possible.
- Can you hide something and ask a family member to find it using your map? Put a big X in the spot where you hid the item.

