



Christmas Holiday 2019

Deputy First Minister's Maths Challenge



The Scottish
Mathematical
Council



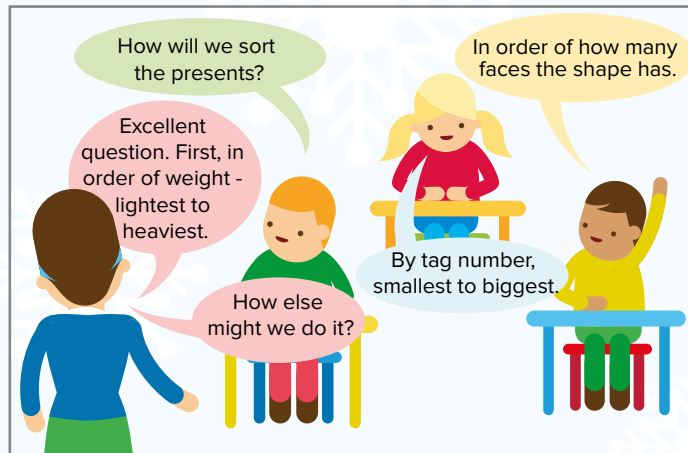
Scottish Government
Riaghaltas na h-Alba
gov.scot

Puzzle 1 - Guess the Secret Santa Present

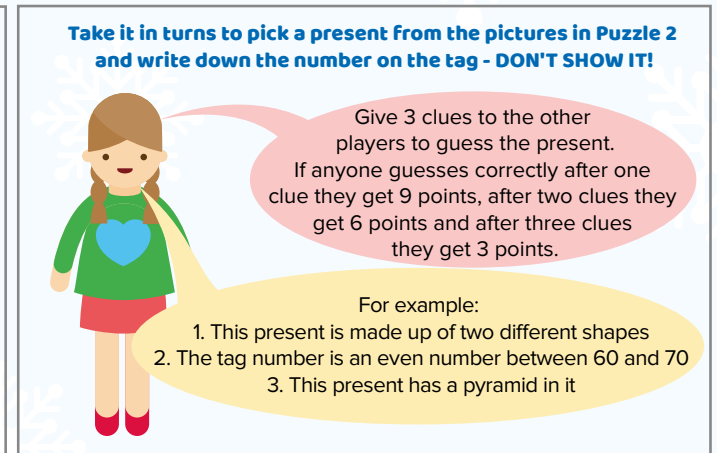
NOT TOO LONG AGO – IN A SCHOOL NOT TOO FAR AWAY...CHRISTMAS WAS GETTING CLOSER IN MISS ELTOW'S CLASS...



THE CHILDREN BROUGHT THEIR WRAPPED PRESENTS INTO CLASS.



Time to play GUESS THE PRESENT!
For two or more players.



Puzzle 2 - Secret Santa Presents

| | | |
|---|---|---|
|  180g |  130g |  230g |
|  250g |  260g |  240g |
|  280g |  200g |  290g |
|  190g |  170g |  160g |

| | | |
|--|--|---|
|  210g |  165g |  110g |
|  120g |  100g |  380g |
|  140g |  195g | |

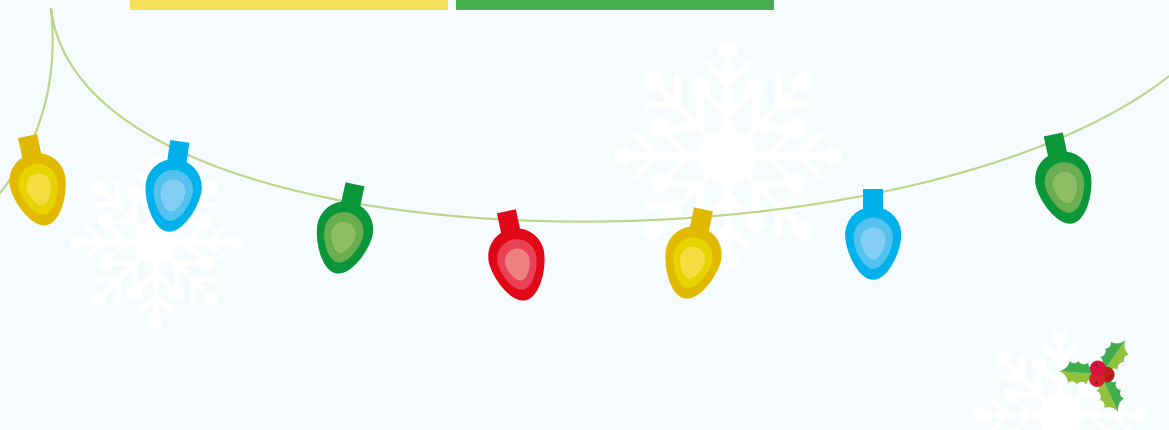
Miss Eltow asks the children to work together to put all of the presents into five sacks. There does not need to be the same number of presents in each sack but each sack must weigh the same. **Can you help the Primary 4 children to complete the task?** You'll need a bit of paper and a pen, and a calculator and an adult might help too! There is more than one solution.



Puzzle 3 - Secret Santa Gift Tag Clues

Work out the answers to the Christmas clues below and match them to the number on the Christmas present tags in Puzzle 2.

| | | | | | |
|---|---|---|--|--|--|
|  <p>What number is double 23?</p> |  <p>The song The _____ Days of Christmas is often sung at this time of year.</p> |  <p>A cracker costs 25p and a candy cane costs 35p. How much altogether?</p> |  <p>Blitzen is 5 years older than Rudolf who is 36 Reindeer Years. What is their total age?</p> |   <p>1 elf weighs 34kg. What will 2 elves weigh?</p> |   <p>Crackers are sold in boxes of 6. How many boxes are needed for 18 crackers?</p> |
|  <p>At the start of Christmas Eve, how many hours until the start of Christmas Day?</p> |  <p>Twelve drummers drumming, eleven pipers piping, ten lords a-leaping. How many people?</p> |  <p>Four calling birds, three French hens, two turtle doves, and a partridge in a pear tree. How many legs do they have altogether?</p> |  <p>There are 28 cards, 28 envelopes and 38 presents in a box. How many items altogether?</p> |   <p>What is the smallest 2-digit number?</p> |  <p>Your street has 75 houses in it and you send a card to each of your neighbours. How many cards will you send?</p> |
|   <p>How many days in December?</p> |  <p>Sam spends £2.89 on wrapping paper. What change does he get from £3 (in pence)?</p> |   <p>What is the biggest 2-digit number?</p> |   <p>Wrapping paper is sold by the metre. How many centimetres in 1 metre?</p> |  <p>Andrew has 72 Christmas decorations. He gives half to his sister Andrea. How many is he left with?</p> |  |
|  <p>3 Christmas trees each have 21 decorations. How many decorations are there altogether?</p> |  <p>4 people each get 8 Brussels sprouts on their plate. How many Brussels sprouts are there in total?</p> |   <p>Which date in December is Christmas Day?</p> | | | |





Issued to Primary 4 pupils in Scotland for Christmas holiday maths family fun.

Developed in partnership between the **Scottish Government** and
The Scottish Mathematical Council.

We will be publishing the solutions and workings on our Making Maths
Count blog (blogs.gov.scot/making-maths-count) from 6 January 2020.

Parents and carers

Please check out Parentzone Scotland www.education.gov.scot/parentzone and Parent Club www.parentclub.scot for more ways to enjoy numeracy and maths.

What you can do as a parent or carer

- Play board games! Games can involve a lot of maths: this could be counting squares, looking for sequences, moving in different directions, exploring probability by rolling dice or being dealt a card, and following logic and rules.
- Play puzzles and puzzle-like games. Examples include Noughts and Crosses, Guess Who?, Sudoku, Dominoes, Battleships and Draughts. These involve strategic thinking, problem solving, and planning, as well as lots of the skills mentioned above.
- Include children in activities that use maths. For instance cooking often asks for lots of quantities and measuring as well as shapes, times and temperatures. Shopping involves prices, counting money and checking dates (the expiry date).
- Estimate all sorts of things together: “I wonder how many steps there are here?”
- Plan journeys together, look at maps, timetables, and talk about distances.
- Talk about maths in a positive way – that way your child will too!

