## Year 2 Solutions

## Problem One



## Tom Wendy

First aid kit
Mr Roberts

## Problem Two

There are five chickens and three sheep.
Sheep $\rightarrow 3 \times 4=12$ legs Chickens $\rightarrow 5 \times 2=10$ legs
12 legs +10 legs $=22$ legs 3 sheep +5 chickens $=8$ heads

## Problem 3

Here is an example of working systematically to find the solution:
If there were 6 eggs in the brown basket, 5 eggs in the red basket and 8 eggs in the pink basket, that would only make 19 eggs.

If there were 7 eggs in the brown basket, 6 eggs in the red basket and 9 eggs in the pink basket, this only makes 22 eggs.

So finally, if there were 8 eggs in the brown basket, 7 eggs in the red basket and 10 eggs in the pink basket, there would be 25 eggs altogether.

## Problem 4

There are a lot of possible bracelets - 24 in total!
It is up to you how many you want your child to find. For example, more able mathematicians may be able to find all, whereas others may need to stop after 12 or even 6.

The most important aspect of this task is that they explore how to work systematically i.e. only changing one thing at a time to make sure they don't miss any possible solutions.
Here are the different possibilities if you need them:
There are three possible colour combinations for each bracelet - red and purple, red and blue, blue and purple - and 8 different bead combinations. $3 \times 8=24$

Here are the possible combinations for a symmetrical bracelet:


