## 7 <br> MathShed

Festive Problems

$14^{\text {th }}$ December


## Challenge 1:

Yasmin has 16 baubles.
She gives 2 each to five of her friends.

How many baubles does she have left?
Bar Modelling:
Number Sentences:

Yasmin has 16 baubles.
She gives 2 each to five of her friends.

How many baubles does she have left?

## Bar Modelling:



Number Sentences:

$$
\begin{aligned}
& 5 \times 2=10 \\
& 16-10=6
\end{aligned}
$$

Yasmin has 6 baubles left.

## Challenge 2:

Jamal has been making Christmas cards. He gives 14 to his swimming friends and 17 to his dance friends. He then makes 10 more cards. He now has 32 cards. How many Christmas cards has he made in total?


## Bar Modelling:

Number Sentences:

## Challenge 2:

Jamal has been making Christmas cards. He gives 14 to his swimming friends and 17 to his dance friends. He then makes 10 more cards. He now has 32 cards. How many Christmas cards has he made in total?


Number Sentences:

$$
14+17+32=63
$$

Jamal has made 63 Christmas cards in total.

A gift box is filled with gingerbread and has a mass of 540 g . It is emptied and refilled with candy canes to a mass of 390 g . The gingerbread weigh double the candy canes' mass. What is the gift box's mass?


## Bar Modelling:

Number Sentences:

## Challenge 3:

A gift box is filled with gingerbread and has a mass of 540 g . It is emptied and refilled with candy canes to a mass of 390 g . The gingerbread weigh double the candy canes' mass. What is the gift box's mass?


Number Sentences:

$$
\begin{aligned}
& 540-390=150 \mathrm{~g} \\
& 390-150=240 \mathrm{~g}
\end{aligned}
$$

The gift box has a mass of $\underline{240 \mathrm{~g}}$.

## Challenge 4:

Three buckets contain the same amount of glitter. $25 \%$ of the glitter is poured from Bucket A to Bucket C. A quarter of the glitter is poured from Bucket $B$ to Bucket $C$.
 There is 450 g more glitter in Bucket C than Bucket A. What mass of glitter was in each bucket originally?

## Bar Modelling:

## Number Sentences:

## Challenge 4:

Three buckets contain the same amount of glitter. $25 \%$ of the glitter is poured from Bucket A to Bucket C. A quarter of the glitter is poured from Bucket $B$ to Bucket $C$. There is 450 g more glitter in Bucket C than Bucket A. What mass of glitter was in each bucket originally?
$\square$

Number Sentences:

$$
\begin{aligned}
& 450 \div 3=150 \mathrm{~g} \\
& 4 \times 150=600 \mathrm{~g}
\end{aligned}
$$

There was 600 g of glitter in each bucket originally.

