## Maths problem solving, 8/1/21 CHOCS IN A BOX

## Imagine you had your own chocolate company. What would you call it?

Your first product is a box of chocolates. There are 36 chocolates in each box.

Challenge 1:

Using squared paper and a ruler, draw every possible box that will fit 36 chocolates exactly. The boxes must be rectangular.

## Now choose one of your boxes.

- There are four varieties of chocolate in your box.
- There are an equal number of each chocolate in the box.

- Challenge 2:
- Write a number sentence to show how many of each chocolate are in each box.

Choose a different colour for each of your four different chocolates.

- Challenge 3:
- Can you find a way of arranging the 36 chocolates in the box so that none of the sweets is directly next to another one of the same colour?
- Is there more than one way of doing it?

Additional challenge: use isometric (triangular) paper