

## School Fair Necklaces

<https://nrich.maths.org/9692>

- Rob and Jennie were making necklaces to sell at the school fair.
- They decided to make them very mathematical.
- Each necklace was to have eight beads, four of one colour and four of another.
- And each had to be symmetrical, like this



- How many different necklaces could they make?
- Can you find them all?
- How do you know there aren't any others?
- What if they had 9 beads, five of one colour and four of another?
- What if they had 10 beads, five of each?
- What if.....???????