

# Jack's Symmetrical Painting

A fun story about  
symmetry and how  
to use graphs!



Once upon a time, there was an artist called Jack. He painted all things, from horses to houses, and kings to kangaroos.

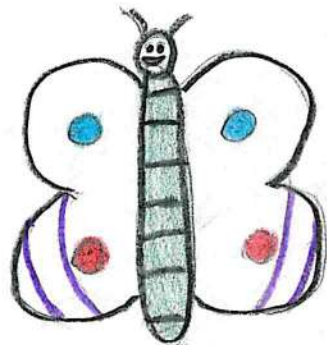
However, one day, he couldn't find anything to paint. He was completely out of ideas!



Jack went outside, and perched on a pink pansy, was the most beautiful butterfly he had ever seen!

'Hello! I'm Jack,' he said. 'You are very pretty, may I paint you?'

'Hello Jack, I'm called 'symmetry'; the butterfly said. 'I'd love for you to paint me!'

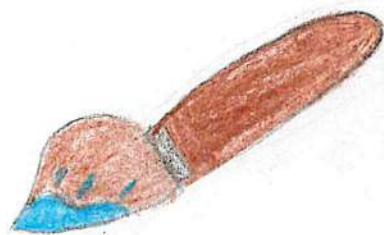


Jack grabbed his paintbrush and canvas, and started to get to work.

He was soon almost done, but no matter how hard he tried, he just couldn't draw her wings the same.

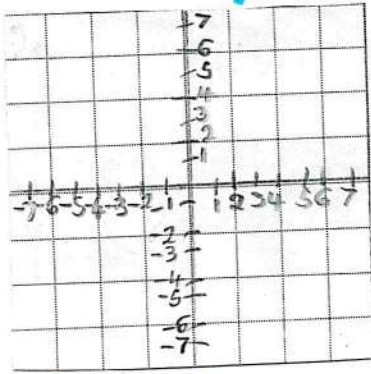
Noticing this, Symmetry said:

'I know a way you can draw them easily.'



'If you want to paint my wings the same, you should draw a faint graph over your canvas.'

She picked up a pencil and drew:

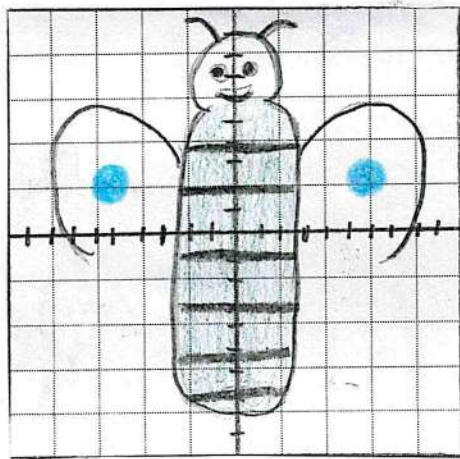


Jack then drew the same graph over the picture.



'Start my wings at 3,3, and make sure you do the same things on both halves of the graph, as I am symmetrical. This means that my left and right sides are exactly the same. This is the same with all butterflies!'

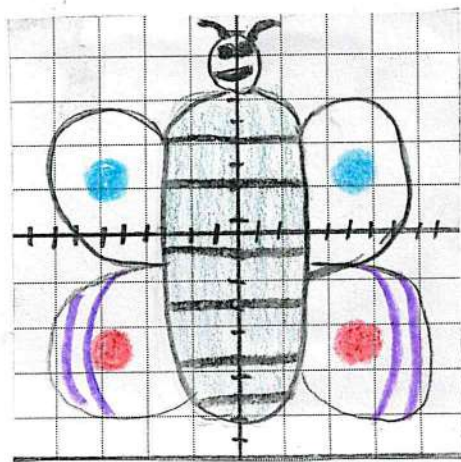
'Wow!' exclaimed Jack. 'This is really quite fun.'



'Now that you've drawn my top wings, you can start my bottom ones. You could start at 3,-1. Don't forget to do the same on the other side, so start at -3,-1.' Symmetry told Jack.

'Done! What do I do next?' Jack asked.

'Just one more thing left.'



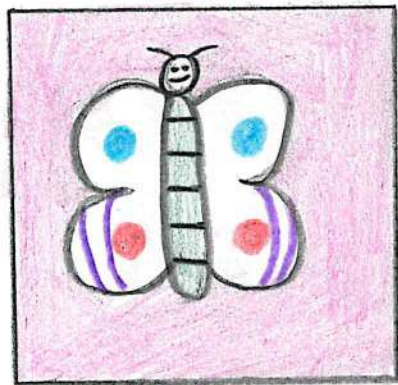
All you need to do now,' said Symmetry 'is rub out the graph, and you have a great picture.'

Jack rubbed out the graph like Symmetry said. It truly was a beautiful picture.

'Thanks so much Symmetry!'

Jack said, grinning at her.

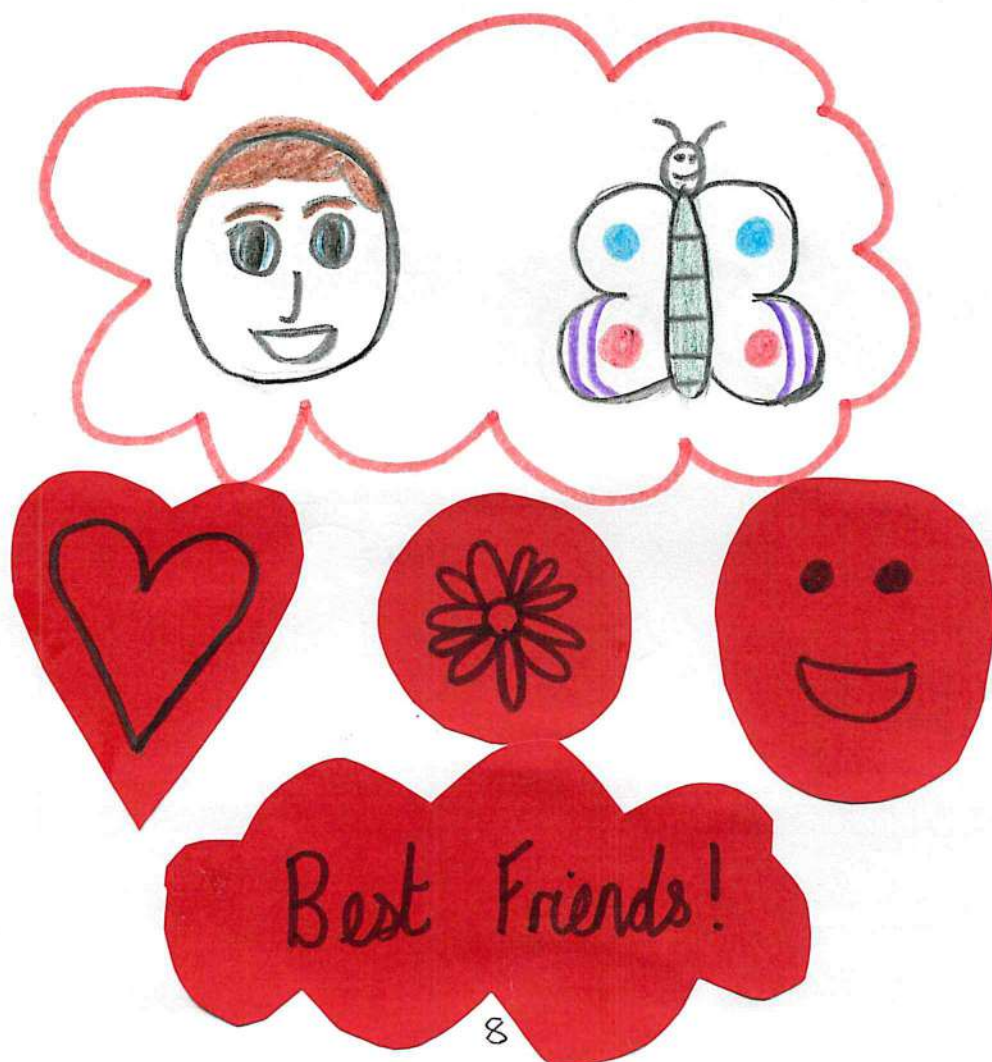
'No problem!' she told him.





Ever since then, Jack and Symmetry have remained best friends.

Remember, you can use Symmetry's tips for your own artwork, or in maths lessons!



Meet Jack and  
Symmetry, as they  
learn all about how  
to draw a symmetrical  
picture!

