Why do snowflakes have six arms?

Look at my mitten! Six arms! Why do snowflakes have six arms?



Why?

1. **Water bits like to join up in rings of six.**
   Every snowflake starts high up in a freezing cold cloud, full of teeny tiny water bits, much too small to see. Each water bit looks a little like a ball with two small bumps. When it is very cold, they stop wiggling around and hold on to each other, in rings of six.
2. **Ring after ring makes a baby snowflake.**
   Six, and six, and six. The frozen water bits build a tiny, flat piece of ice with six sides. This shape is called a hexagon. It is the baby snowflake!
3. **Six corners grow into six arms.**
   As the baby snowflake floats through the cloud, more water bits fly to it and freeze on. The six corners stick out the most, so they catch the most water bits and grow the fastest.

Try it! Count the arms

You need: dark paper, a freezer, a magnifying glass, a snowy day

1. Put a piece of dark paper in the freezer first.
2. Take it outside and catch some snowflakes on it.
3. Look with a magnifying glass, and count the arms!

What happened? Six arms! The frozen water bits join up in rings of six, and the six corners grow into arms.

Video + more questions:
whywhywhykids.com/snowflake

scan with a grown-up