## **CURVE STITCHING**

For this **very simple task**, all you need is a sharp pencil and a 30 cm ruler.

**WARNING**: Although this task is amazingly simple to understand, it is also very, very easy to go wrong. Make sure you concentrate and **think** before you **draw**.

In the diagram shown below you can see a circle with 60 dots arranged around its circumference.

## Action:

- print out the diagram
- draw a straight line from dot 1 to dot 2
- draw a straight line from dot 2 to dot 4
- draw a straight line from dot 3 to dot 6
- then draw from 4 to 8, 5 to 10, 6 to 12, etc, mapping the two-times table
- even after you have done **dot 30** to **dot 60** you can keep going. If you double 31 you get 62. There is no **dot 62** on the circle but you can re-use **dot 2**.

You should end up with a special shape called a cardioid. What does it remind you of?

Now see what happens if you map the three-times table. Or the four-times table.

