## 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 $\mathbf{1 0 , ~} 6$ to $\mathbf{1 2}$, 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 fourtimes table.


