Bracelets

Start with any two numbers less than 10. For example, 1 and 5.

Make a 'number bracelet' like this:

$$1 \rightarrow 5 \rightarrow 6 \rightarrow 1 \rightarrow 7 \rightarrow 8 \rightarrow 5 \rightarrow$$

Continue this chain – what happens?

How many different bracelets can you make?

Investigate further.