## Halve it, halve it again, halve it again! Investigation

You can test whether any whole number is a multiple of 8 by halving it, halving it again and then halving it again. If at any stage you can't halve it to make a whole number, then it is not a multiple of 8.

Is this statement true? Investigate. Test it on lots of 2 and 3 digit numbers. Check you're correct by using a calculator. Sort the numbers you test into a table like the one below. Do you notice any rules or patterns?

Multiple of 8	Not a Multiple of 8	
		<u>Rules/ Patterns</u>