Maths - Doubling numbers

When doubling numbers, instead of dividing by 2 like we do with halving, we need to times the number by 2. We can do this using partitioning to help us.

For example:

Double 12 = 24 **12** 10 x 2 = 20

 2 x 2 = 4

 **10 2**

 **20 4**

 **24**

Have a go at doubling these numbers, using partitioning and your 2 timestables to help you. Remember you won’t need to partition all of the numbers to find the answer.

14 6 11 8

23 18 15 27

Now complete the doubling machine below filling in the missing numbers. I have done the first one for you.

**Doubling**

**machine**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **IN** | **6** | **3** | **5** | **8** | **4** | **10** | **12** | **15** | **20** | **24** | **30** | **32** |
| **OUT** | **12** |  |  |  |  |  |  |  |  |  |  |  |

Challenge

Work out the rule in these sequences.

For example 2,7,15,31- The rule is to double the number than add 1.

1. 14, 26, 50, 98, 204
2. 5, 15, 35, 75, 155
3. 4, 10, 22, 46, 94, 190