

➤ Notes for parents. Activity next page.

The purpose of this task is to help your child:

- learn to use tables (charts) to connect members of a sequential pattern.

Think about this:

- Where will they write the tables that they'll use to show what is happening in the pattern of each 'operations machine'? Suggest that they make two columns and write at the top, Numbers In and Numbers Out.
- Encourage your child to look carefully at the number operations (+, -, x, ÷) shown on each machine.
- Your child will need you, or another family member, to talk with them about what they are doing (instead of a classmate).
- Encourage them to ask you what you think is happening in any of the patterns!
- Your child might like to create an 'operations machine' of their own and get someone in your family to have a go at working it out.



Operation Time

You need a calculator

a classmate

Activity One

Put each number through its operations machine.
Write down the numbers that come out.

a. 20, 30, 40

b. 12, 8, 4

c. 14, 12, 6

d. 18, 13, 7

The image shows four whimsical operation machines. Machine a is a grey teapot with a black handle and spout, and a purple knob, with a large '÷5' on its side. Machine b is a yellow cylindrical tank with a purple funnel on top and a red arrow pointing out from the bottom left, with '+10' on its side. Machine c is a red cone on a grey base with a yellow faucet on its side and a red arrow pointing out from the bottom left, with 'x2' on its side. Machine d is a blue cylindrical can with a yellow handle and a red arrow pointing out from the bottom left, with '-7' on its side. Each machine has a red arrow pointing into its top.

Activity Two

Simon put numbers through his operations machine.
He drew up a chart to help him keep a record of the numbers that he put into the operations machine and the new numbers that came out the other end of the machine.

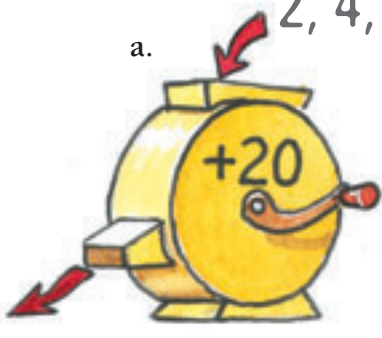
1. Copy Simon's chart into your book and fill in the blanks.

Number in	Number out
1	4
2	5
3	
4	



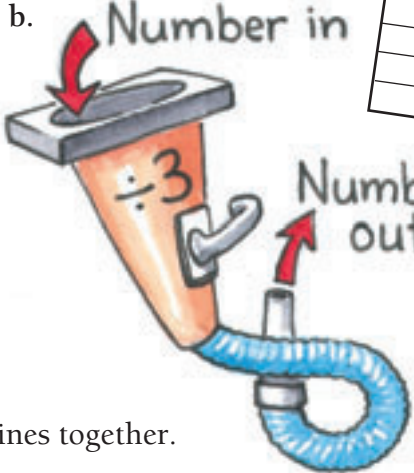
2. Simon has used two different operations machines here. Copy his new charts into your book and fill in the blanks:

a. 2, 4, 5, 6



Number in	Number out
2	22
4	
6	25

b. Number in




Number in	Number out
6	
12	
	5
	8

Activity Three

Simon joined some of the operations machines together.

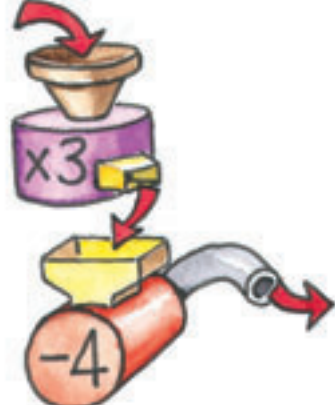
1. Copy Simon's charts into your book and fill in the blanks.
2. Discuss with a classmate the patterns that you can see in these In/Out tables.

a.




Number in	Number out
5	18
6	
7	
8	

b.




Number in	Number out
3	
5	
9	17

c.



Number in	Number out
	14
5	
7	49
12	

d.



Number in	Number out
6	
10	
	11
	14
22	