Number Tricks

You need 2 cups
a classmate

multilink cubes

Activity One

Follow this number trick with cups and cubes:



Put any number of cubes in a cup.



Put three more cubes outside the cup.



Double what you have. (Don't forget to put cubes in the second cup.)



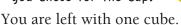
Take away the number you chose for the cup.



Halve what you have left.



Take away four cubes from outside the cups.



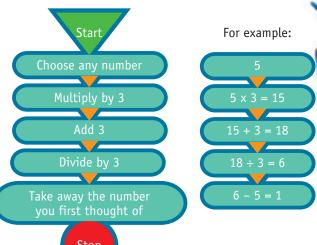
Try the trick again with other numbers of cubes in the cup. Are you always left with one cube?

Activity Two

 Follow this number trick with a classmate.
 Try several different starting numbers. 2. What do you notice about the stop number in this number trick? Why does this happen? Discuss this with your classmate.

Use cups and cubes to explain why it works.

Start	For example:
Choose any number	4
Add 4	4 + 4 = 8
Multiply by 2	8 x 2 = 16
Subtract 4	16 - 4 = 12
Divide by 2	12 ÷ 2 = 6
Take away the number you first thought of	6 - 4 = 2



Stop