

The Crow and the Pitcher

NAME _____

In this activity, you will simulate the story of “The Crow and the Pitcher” using a graduated cylinder and marbles.

Fill your graduated cylinder with water, up to 100 mm height. You will be adding marbles until the water reaches a level of at least 120 mm—the level at which the crow can reach the water.

1. Before you begin the activity, make a prediction:

I believe that I will need to add 2-3 marbles in order to raise the water level to 120 mm.

2. Add the marbles one at a time and record the effect that each additional marble has on the water level. Complete the table.

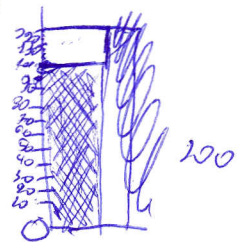
NUMBER OF MARBLES (x)	RAISE OF WATER LEVEL (MM) (y)
0	100
1	101,8
2	103,6
3	105,4
4	107,9
5	110
6	112,8

Handwritten calculations:

$$\begin{array}{r} 20 \overline{) 22} \\ \underline{40} \\ 90 \overline{) 1,8} \\ \underline{18} \\ 0 \end{array}$$

3. What is the raise of water level with no marbles added? Where will this point be located on a graph made from the data in the table?

Handwritten notes: @ 100 mm



4. Find the rate of change. What values are changing in the experiment? Which value change is dependent and which is independent?

