

The Raven and the Jug

A Fable

A raven, ready to die with thirst, flew with joy to a jug, which he beheld some distance away. But when he came up to it, he found the water so low that with all his stooping and straining he was unable to reach it. There upon he tried to overturn the jug, so that at least he might be able to get a little of it. But his strength was not sufficient for this. At last, seeing some pebbles nearby, he cast them one by one into the pitcher; and thus, by degrees, raised the water up to the very brim and satisfied his thirst. (Adapted from Aesop's Fable The Crow and the Pitcher)

Application: Where force fails, skill and patience will prevail.

Activity

"How many pebbles would it take to raise the water to a level high enough for the raven to drink?"

Concepts – volume, liquids, unit rate, graphing the relation, tables etc.

Supplies for each group

- Pitcher of water
- Transparent jug – glass, medicine bottle, (all the same or all different)
- Pebbles (close to the same size) glass pebbles from dollar stores work well!
- Ruler

All supplies at each group, the instructor read the fable, she then posed the question and then left us to think. She walked around to assist groups.

Notes – all 7 groups had different sized "jugs". This turned out to be fantastic! All groups listened to each other as our situations were slightly different. Processes were similar, results similar but with different containers presentations became interesting vs repetitive.

We were told we could add as much water as we wanted to start with. (This was a problem for my group.....) With students I would give more guidance for this portion.

With each pebble added, the change in height was noted, many trials done, averages calculated, volume calculated by some and volume converted to pebbles by some.

Posters required tables, graphs, verbal explanation of our findings/conclusions and we had to sketch a picture of our jug.