

Numeracy through Science module

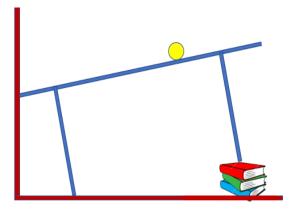


Rolling jars of sugar (Post-Primary)

Read it -- Try it safely -- Explore it further

Which jar of sugar will be the last to get to the bottom of the ramp?





Students are given 4 empty jars and a bag of sugar and are given the challenge of measuring out "one-third" and "two-thirds" full of sugar.

The students are asked:

"if all the jars roll down a ramp together, which jar will get to the bottom last?" Teacher needs to place a table against a wall and place some books under a table-leg to produce a ramp of gentle slope.

Safety: Use a cushion to avoid the glass jars breaking.

Extension activities

Repeat for a variety of different gentle slopes
Look at what is happening to the sugar as the jars roll.
Can you explain why they travel at different speeds?
Can you find an angle where three jars roll to the bottom but one jar stops half-way?
Repeat with rice or salt instead of sugar.
Is the outcome different?