



# Opposition: Flight of a cylinder

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## 22. Flight of a cylinder

A hollow paper cylinder rolls down on an inclined desk. Investigate the motion of the cylinder after it reaches the edge of the desk and starts the free fall.

Task partially/fully/poorly fulfilled.

# Theory



1. Had all of the forces in the experiment
2. Mentioned valuable factors
3. Mentioned rotational energy



1. The resultant force is calculated by angle
2. No model for movement across the x axis
3. No theoretical model
4. No mention of angular momentum
5. Assumed 0 friction
6. Thought mass of cylinder mattered

# Experiment



1. Multiple angles of the slope
2. Varied angle of slope
3. Different size cylinder
4. Measured mass



1. Didn't vary length of slope
2. Mass doesn't matter
3. No graphing form for movement
4. Graphing evidence but no measurements
5. No graphs ( $v$  of  $t$ ) or ( $x$  of  $t$ )