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# 3D Printed Gears and Printer Limitations

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1C03 - Milestone II

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## **Group 41**

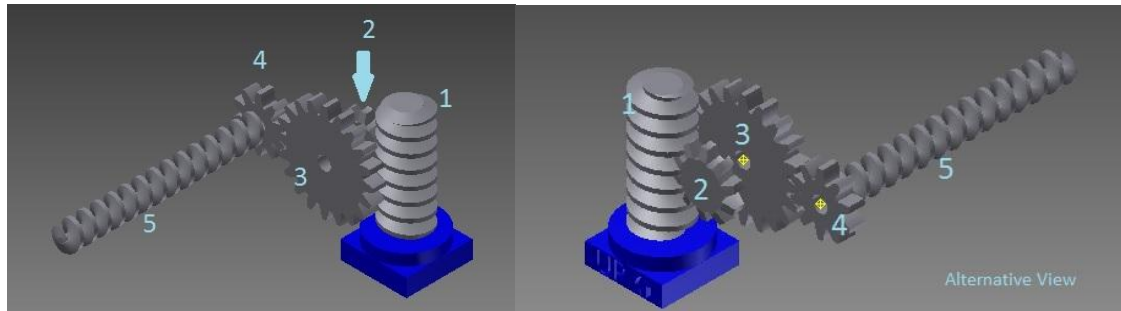
400023762 - Shalmi Patel  
patels19@mcmaster.ca

400032887 - Kylee Schram  
schrak1@mcmaster.ca

400022825 - Ali Shah  
shahs12@mcmaster.ca

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## Current Solid Model Design



## Printer Limitations

The Orion Delta Printers have a nozzle diameter of 0.5mm and have a printable area of 120mm. They can print features with a height up to 235mm. The printer resolution is 1mm, but a larger dimension is preferred to accurately print features. Anything smaller is prone to fragility and therefore, given practical constraints, the smallest size that should be printed is 2mm (twice the resolution). With regards to this design, the purple worm (see below photo) is an example of a feature that failed due to its central radius being less than 2mm in size.

## Printed Gears

