

Unit 6 Cereal Box Design Project Template

1. Which figure will you choose for your cereal box design? Write down the formulas for the surface area and volume of this figure and explain why you chose it.
2. Find the measurements and calculate the volume and surface area of a standard cereal box.
Measurements:

Surface Area:

Volume:
3. Calculate the cost of manufacturing a standard cereal box if cardboard costs \$0.05 per square inch. (Hint: is the surface area or volume made out of cardboard?)
4. Design a new cereal box that will hold the same amount of cereal but reduce manufacturing costs. Draw a net of your new design. Include all relevant measurements so that your cereal box can be mass produced.
5. Prove that your new design holds the same amount but can be manufactured more cheaply.
6. Why do you think that cereal is packaged in rectangular boxes?
7. Explain the advantages and disadvantages of your design.