

Popcorn Container Challenge



Have you ever thought about all of the things that fly into Pearson International Airport? It's not just passengers, it's cargo too!

Challenge: Build a cargo hold that can hold exactly 100 pieces of popcorn!

Remember, a cargo hold is the area of a plane where all kinds of cargo is loaded and stored for a safe flight.

If you don't have popcorn you can use something else: chocolate chips, candies, peanuts, seeds, marbles, etc.

If you can, make it a contest with your family or challenge a friend online, and see who can build the most accurately sized cargo hold!

You will need:

- Paper
- Tape or a stapler
- Scissors
- A ruler or measuring tape

Instructions

1. Choose 5 pieces of popcorn to measure. Using your ruler, measure the length, width, and height of the popcorn to determine the average volume of a piece of popcorn. Then use those measurements to design your container.
2. Your container must be made from paper but can be any shape you like.
3. The popcorn must be exactly at the top of the container - it can't overflow or be lower than the edge of the container.

Tips on how to calculate volume:

Prism: length x width x height

Cylinder: $\pi \times r^2 \times h$. Remember, $\pi = 3.14$