

A Million Grains of Rice

You need: 500 grams of rice, centimetre cubes, square grid paper, scales, a classmate

Sarah and Bharat's teacher wants them to work out what 1 000 000 grains of rice looks like.

I hope we won't have to count each grain ...

I wonder if we could start by measuring a tablespoon of rice and counting how many grains there are in it?

We could make a pile of 100 grains of rice, see how big it is, and then estimate!

Good idea! Or we could count the number of grains in 10 grams and work out how many squares they cover. Or, what if we spread a single layer over a sheet of squared paper and counted the grains in some of the squares?



- a. With a classmate, plan an investigation to find out how many 500 gram packets of rice you would need to get a total of 1 000 000 grains. How many pieces of A4 paper would 1 000 000 grains of rice cover in a single layer?
 - **b.** Present your investigation, explaining how you worked out your answers.
- 2. Further investigation:
 - a. Would one million 1 centimetre cubes cover the floor of your house? How do you know?
 - b. How many 1 centimetre cubes would you need to cover your classroom floor?

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