

World Problems

Advice: When filling out order forms, be very careful to write down the correct catalog numbers. Consider the case of Principal Hardy of Slogdoggie Elementary School. Thinking she was ordering 15,000 pencils for the school, she wrote #12913 on the order form. Unfortunately, pencils are #12973, so Principal Hardy received an order of 15,000 globes, each 30 cm across. The company said they'd pick them up, but it would take a month. Meanwhile, what does a person do with that many globes?

Dana, the custodian, loved to make up problems. He talked with Ms. Nichols and her math class about storing the globes and asked how many globes they could store in their room if they took everything else out. The room was 12 m long, 9 m wide, and 3 m high. Dana told the class that the globes should be stacked as shown in the diagram, with no overlap.



Dana then pointed out that there would be room between the globes for smaller balls. He asked the students to figure out the diameter of the largest ball that could fit between every four globes. He also asked how many of these balls it would take to fill the room if all the globes were removed. Try to figure out Dana's world problems.

• Spice It Up! •

We've just received word that the company absolutely refuses to take back the globes. We're stuck with them! It's up to you to come up with something interesting, fun, useful, or unique that we can do with 15,000 globes. Write down at least five good ideas. Illustrate your favorite idea.