Hey there! Density is a way of describing how tightly packed the particles of a substance are. To calculate the density of ice cream, we need to know its mass and volume. Mass is like how heavy something is, and volume is how much space it takes up. In our case, the ice cream scoop has a mass of 140 grams and a volume of 250 cubic centimeters.

To find the density, we can use a simple formula: Density = Mass / Volume. In this case, Density = 140g / 250cm³. Let's do the math step by step: Density = 0.56g/cm³. That's our answer!

Think of it this way: Imagine you have a glass full of marbles and some of them are close together while some are spread out. The close-packed marbles represent high density, while the spread-out ones represent low density. Ice cream is like those marbles - it can be dense or not so dense, based on its mass and volume.

So, in our ice cream scoop example, the density is how tightly packed the ice cream particles are within that scoop. The density value we got, 0.56g/cm³, tells us how much ice cream mass fits into each cubic centimeter of space.

Density is an important concept in science and helps us understand why some things float while others sink. Now you know how to calculate the density of ice cream, and you can use this knowledge to explore more fun and interesting things about different materials and substances! Enjoy your ice cream and learning about science!