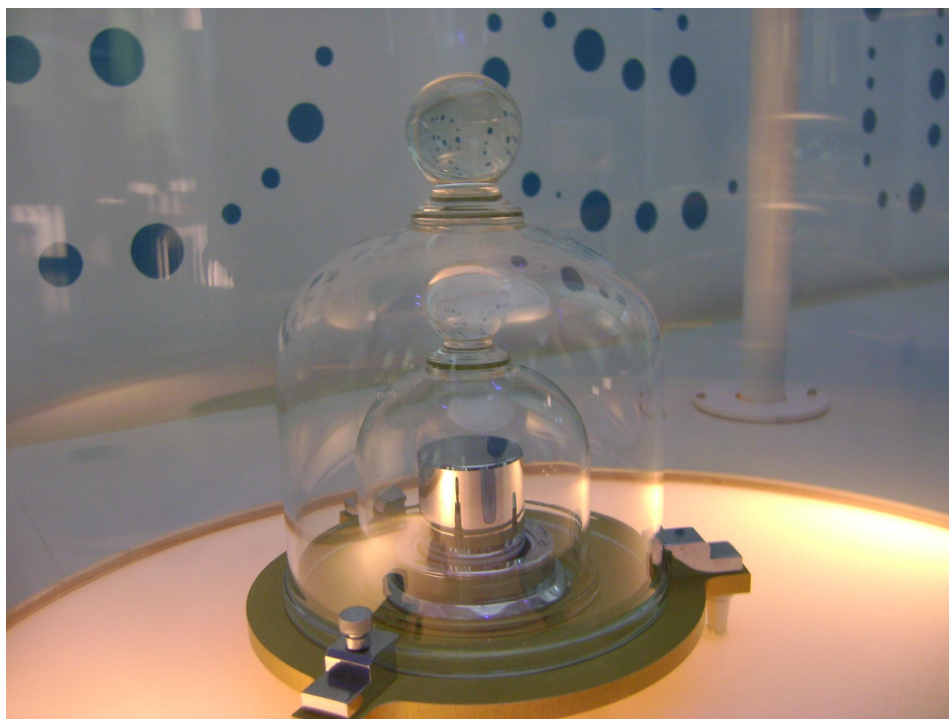


Discussion: Defining a Unit of Measurement

When you consider a unit of measurement – like a mile – you likely think of it as static, unchangeable, the same across the world to everyone. Isn't that the point of those units, anyway?

However, one unit a measurement – the kilogram – was recently redefined. In 1795, the kilogram was originally defined as the mass of one liter of water. Though simple to understand, it can have accuracy issues.

In 1889, a cylinder of platinum-iridium became the standard of the unit of mass for the metric system. This cylinder is a one-of-a-kind man-made item.



A replica of the International Prototype of the Kilogram on display at Cité des Sciences et de l'Industrie, featuring the protective double glass bell. The IPK served as the primary standard for the kilogram until 2019.

In May 2019, the definition of a kilogram was changed by the vote of a multi-national group of scientists. Read more about this decision in [this article by the National Institute of Standards and Technology](#).

Think about the following questions as you read: Why do you think the definition was ultimately changed? What might be some problems with the physical standard of the old definition? What could be some issues that arise with the new definition? Feel free to do some additional research to better understand the sides of this debate. After reading the article, pick a side in the debate – are you for or against changing the definition of the kilogram? Write a brief argument with your reasoning and then respond to at least one classmate.