

## THE STANDARD

# Properties of Matter

*Make observations and measurements to identify materials based on their properties.*



## PS1.A · Structure and Properties of Matter

"Measurements of a variety of properties can be used to identify materials."

Every material has its own set of properties, like its color, hardness, or whether a magnet grabs it. Think of those properties as a fingerprint no other material shares. **A 5th grader tests several properties, writes down what they find, and uses that list to figure out what the material is.**



## Planning and Carrying Out Investigations

"Make observations and measurements to produce data to serve as the basis for evidence for an explanation of a phenomenon."

5th graders don't just eyeball the material and guess. They run real tests, measure where they can, and record the results so the data becomes evidence. Did the magnet pull it? How many drops until it dissolved? **The numbers and observations they collect are what back up their answer.**



## Scale, Proportion, and Quantity

"Standard units are used to measure and describe physical quantities such as weight, time, temperature, and volume."

Here is the big idea: a real test gives a number with a unit, not just "a lot" or "kind of hard." Saying "it dissolved in 10 milliliters of water" lets another group repeat the test and check. **Standard units make results you can trust and compare.**