

GLOSSARY

A

accuracy the closeness of measurements to the correct or accepted value of the quantity measured (44)

C

conversion factor a ratio derived from the equality between two different units that can be used to convert from one unit to the other (40)

D

density the ratio of mass to volume or mass divided by volume (38)

derived unit a unit that is a combination of SI base units (36)

direct proportion two quantities that give a constant value when one is divided by the other (55)

H

hypothesis a testable statement (30)

I

inverse proportion two quantities that have a constant mathematical product (56)

M

model an explanation of how phenomena occur and how data or events are related (31)

P

percent error a value calculated by subtracting the experimental value from the accepted value, dividing the difference by the accepted value, and then multiplying by 100 (45)

precision the closeness of a set of measurements of the same quantity made in the same way (44)

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Q

quantity something that has magnitude, size, or amount (33)

S

scientific method a logical approach to solving problems by observing and collecting data, formulating hypotheses, testing hypotheses, and formulating theories that are supported by data (29)

scientific notation numbers written in the form $M \times 10^n$ where the factor M is a number greater than or equal to 1 but less than 10 and n is a whole number (50)

SI (*Le Système International d'Unités*) the measurement system accepted worldwide (33)

significant figure any digit in a measurement that is known with certainty plus one final digit, which is somewhat uncertain or is estimated (46)

system a specific portion of matter in a given region of space that has been selected for study during an experiment or observation (29)

T

theory a broad generalization that explains a body of facts or phenomena (31)

V

volume the amount of space occupied by an object (37)

W

weight a measure of the gravitational pull on matter (35)