

SOL Standard 6.4: The student will **compare** and order **whole numbers**, fractions, and **decimals**, using **concrete materials**, **drawings or pictures**, and mathematical symbols.

Decimal Place Value

Place value means the place a digit is in and how much the digit is worth.

Example: 3.625947 The digit 6 is in the tenths place and is worth 6 out of 10
 . 6 tenths = $6/10 = 60\%$

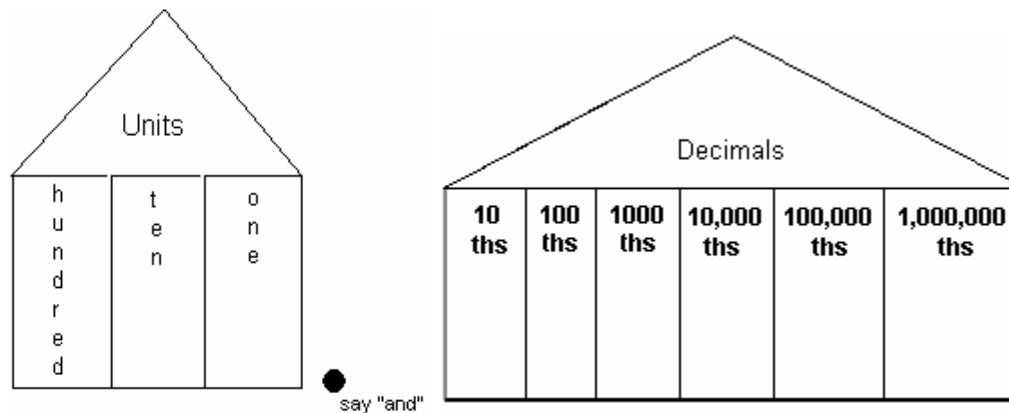
3.625947 The 5 is in the thousandths place and is worth 500 out of 1000
 .005 thousandths = $500/1000 = 50\%$

Decimal numbers can be expressed in many ways.

Standard form: 0.00025
 Zeros to the right of the decimal point serve as placeholders

Short word form: 25 hundred-thousandths
 Write the number followed by the name of the last decimal place.

Expanded form: $0.0002 + 0.00005$
 Show the value of each nonzero digit



3 . and 6 2 5 9 4 7

3 . and 6 hundred 25 thousands, 9 hundred 47 millionths