

Place value of decimals to thousandths

WHAT THIS LESSON TEACHES

The three columns to the right of the decimal point are tenths (0.1), hundredths (0.01) and thousandths (0.001).

→ In 0.305 there are 3 tenths, 0 hundredths and 5 thousandths.

→ One hundredth (0.01) is ten times smaller than one tenth (0.1).

MODEL THIS ON THE BOARD

PLACE A DECIMAL IN COLUMNS

- 1 Write 0.027 in the place-value chart: units . tenths hundredths thousandths.
- 2 The 0 is in units, 0 in tenths, 2 in hundredths and 7 in thousandths.
- 3 Underline the thousandths digit: 7.

ANSWER KEY

a) 4.<u>5</u>82: 5 tenths

b) 3.6<u>7</u>1: 7 hundredths

c) 0.09<u>4</u>: 4 thousandths

d) <u>2</u>.458: 2 units

Q1: 4 tenths

Q2: 2 tenths 7 hundredths

Q3: 3 tenths

Q4: 3 tenths 0 hundredths 5 thousandths

Q5: 1 thousandth

a) Always — By definition of the place-value columns.

b) Always — Zero means none in that column.

c) Sometimes — Only when the number has a thousandths digit.

d) Always — This is the ten-times pattern between columns.

EXTENSION SHEET · STRETCH ANSWERS

S1: between 3 and 4, closer to 3

S2: between 4 and 5, closer to 4

S3: between 3 and 4, closer to 3

S4: $5.71 = 5 + 0.7 + 0.01$

S5: $6.96 = 6 + 0.9 + 0.06$