

Decimals to thousandths

CURRICULUM ALIGNMENT**NUM.PVT.4**

investigate how decimals and percentages (and fractions) can be compared, ordered and expressed in related terms.

INTERACTIVES Place Value Blocks (Dienes) · challenge, display, explore**WHAT THIS LESSON TEACHES**

One thousandth is one part when a whole is split into a thousand equal parts. It is written as the third digit after the decimal point (0.001).

→ 0.007 means seven thousandths: seven of the smallest blocks.

→ In 2.305 the final 5 sits in the thousandths column.

→ In 0.105 the zero holds the hundredths place so the 1 stays in tenths and the 5 in thousandths.

MODEL THIS ON THE BOARD**PLACING 1.204 ON THE MAT**

- 1 Sketch four columns labelled U, t, h, th and put the decimal point after U.
- 2 Write **1** in the units (U) column.
- 3 Write **2** in the tenths (t) column.
- 4 Write **0** in the hundredths (h) column to hold the place.
- 5 Write **4** in the thousandths (th) column and underline it.

ANSWER KEY**Scaffold:** visual check on the page**Q1:** 8**Q2:** 56**Q3:** 2**Q4:** 0.004**Q5:** 1.008

a) **Always** : Thousandths is always the third place after the decimal point.

b) **Always** : The 7 sits in the thousandths column so the value is seven thousandths.

c) **Sometimes** : The thousandths digit can be zero or any digit from 1 to 9.

d) **Sometimes** : True for 0.375; false for 2.305.

EXTENSION SHEET · STRETCH ANSWERS**S1:** between 5 and 6, closer to 5**S2:** $6.96 = 6 + 0.9 + 0.06$ **S3:** $2.52 = 2 + 0.5 + 0.02$ **S4:** $5.71 = 5 + 0.7 + 0.01$ **S5:** $8.32 = 8 + 0.3 + 0.02$