

# Place value, integers and decimals

## Key Vocabulary

Integer—**In/te/ger**—A whole number

Approximate— **Ap/prox/i/mate**—A rough idea of an actual answer

Estimate— **Es/tim/ate**—Using rounded values to be able to calculate an answer to give you an idea of the answer

Ascending— **As/cen/ding**—Going from smallest to largest

Descending— **Des/cen/ding**—Going from largest to smallest

Round— **R/ound**—Replace a value with an approximate value

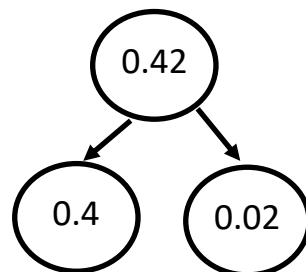
## Place Value

| Billions |   |   | Millions |   |   | Thousands |   |   | Ones |   |   |
|----------|---|---|----------|---|---|-----------|---|---|------|---|---|
| H        | T | O | H        | T | O | H         | T | O | H    | T | O |
|          |   | 3 | 1        | 4 | 8 | 0         | 3 | 3 | 0    | 2 | 9 |

| O |   | $\frac{1}{10}$ | $\frac{1}{100}$ | $\frac{1}{1000}$ |
|---|---|----------------|-----------------|------------------|
| 0 | • | 2              | 3               | 2                |

$$0.2 = \frac{2}{10}$$

$$0.232 = \frac{232}{1000}$$



## Comparing numbers

$$34,000 > 23,000$$

34,000 is greater than 23,000

$$6 + 8 = 3 + 11$$

$$6 + 8 = 14$$

$$3 + 11 = 14$$

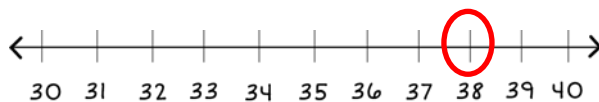
So they are equal

$$4 \times 5 \neq 30$$

$$4 \times 5 = 20$$

So these are not equal

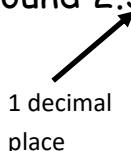
## Rounding



Round 38 to the nearest 10

$$38 \approx 40$$

Round 2.36 to 1 decimal place



2.36  $\approx$  2.7 It rounds up, as the 6 is larger than 5

## Comparing Decimals

| Ones | Tenths | Hundredths |
|------|--------|------------|
| 3    | 2      | 5          |
| 3    | 0      | 9          |
| 3    | 3      | 7          |

Remember, to look the largest value (ones), then the tenths, then the hundredths

Ascending—3.09, 3.25, 3.37