

## Rules for Rounding Measurements

These rules may seem a bit overwhelming at first, so study the examples rather than memorizing the rule itself.

If the digit immediately to the right of the last significant digit you want to keep is:

1)  $> 5$

- then the last significant digit should be increased by 1, i.e.

Rounded to 3 significant figures,

42.68 g  $\longrightarrow$  42.7 g

2)  $< 5$

- then the last significant digit should, remain the same, i.e.

Rounded to 3 significant figures,

17.32 m  $\longrightarrow$  17.3 m

3) 5, followed by nonzero digits

- then the last significant digit should be increased by 1, i.e.

Rounded to 3 significant figures,

2.7851 cm  $\longrightarrow$  2.79 cm

4) 5, not followed by nonzero digits, and preceded by an odd digit

- then the last significant digit should be increased by 1, i.e.

Rounded to 3 significant figures,

4.635 kg  $\longrightarrow$  4.64 kg (since 3 is odd)

5) 5, not followed by nonzero digits, and preceded by an even digit

- then the last significant digit should remain the same, i.e.

Rounded to 3 significant figures,

78.65 mL  $\longrightarrow$  78.6 mL (since 6 is even)