Rounding and Estimation

5 or more, raise the score!
4 or less, let it rest!

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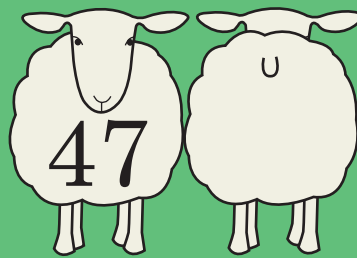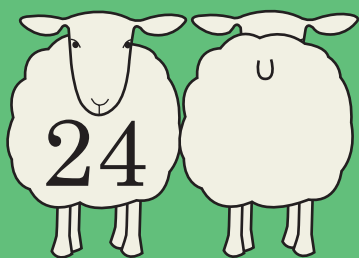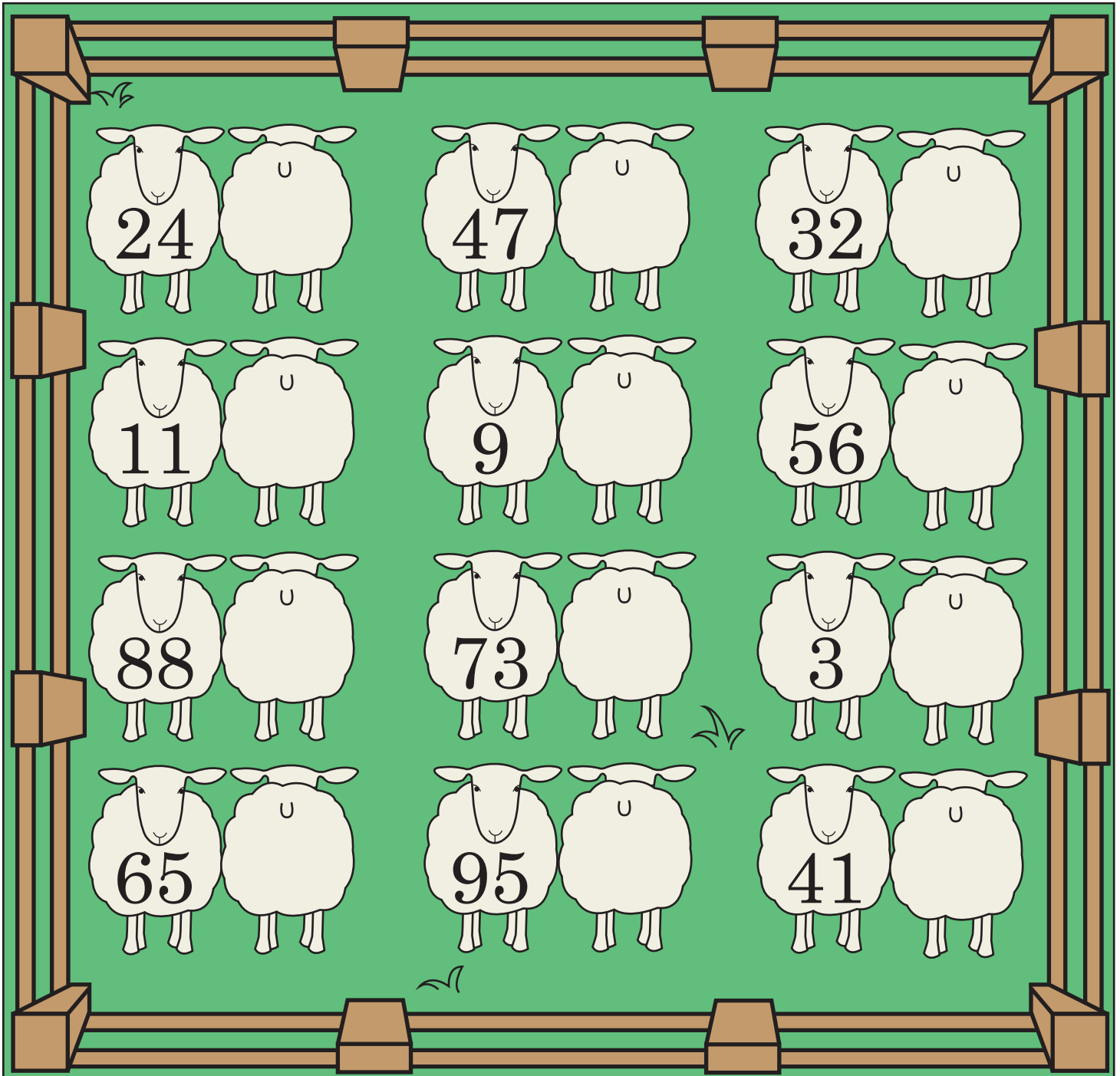## Rounding and Estimation

Wild ~~Round Up~~

Round the numbers to the nearest 10!

If the **ones** number is 5 or greater, round up to the nearest 10.
If the **ones** number is 4 or less, round down to the nearest 10.

18 → 20   13 → 10

24   47   32

11   9   56

88   73   3

65   95   41

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Round 'Em Up!

Round the numbers to the nearest ten.

Rounding to the nearest ten

If the **ones** number is **5** or greater, **round up** to the **nearest ten**.   Example: 1<u>7</u> → 20

If the **ones** number is **4** or less, **round down** to the **nearest ten**.   Example: 1<u>2</u> → 10

56 <u>60</u>	31 _____	18 _____	43 _____
12 _____	27 _____	35 _____	67 _____
48 _____	61 _____	73 _____	86 _____
79 _____	84 _____	24 _____	52 _____

Rounding to the nearest hundred

If the **tens** number is **5** or greater, **round up** to the **nearest hundred**. Example: 1<u>6</u>1 → 200

If the **tens** number is **4** or less, **round down** to the **nearest hundred**. Example: 1<u>1</u>8 → 100

486 <u>500</u>	266 _____	521 _____	651 _____
824 _____	148 _____	378 _____	234 _____
333 _____	613 _____	883 _____	949 _____
551 _____	195 _____	728 _____	762 _____
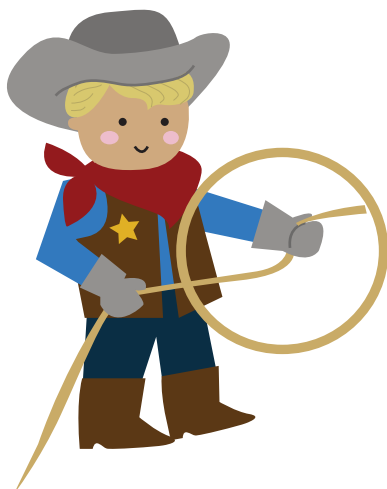
Here's a little rhyme to help you remember how to round numbers:

5 or more, raise the score
4 or less, let it rest

Wild *Round Up*

Round the numbers to the nearest 100.

If the **tens** number is 5 or greater, round up to the nearest 100.
If the **tens** number is 4 or less, round down to the nearest 100.

18<u>5</u> → 200   13<u>6</u> → 100

315   475   136

722   97   556

818   361   228

685   165   998

MEASURING ON THE FARM!

First guess how long you think the measurements are.
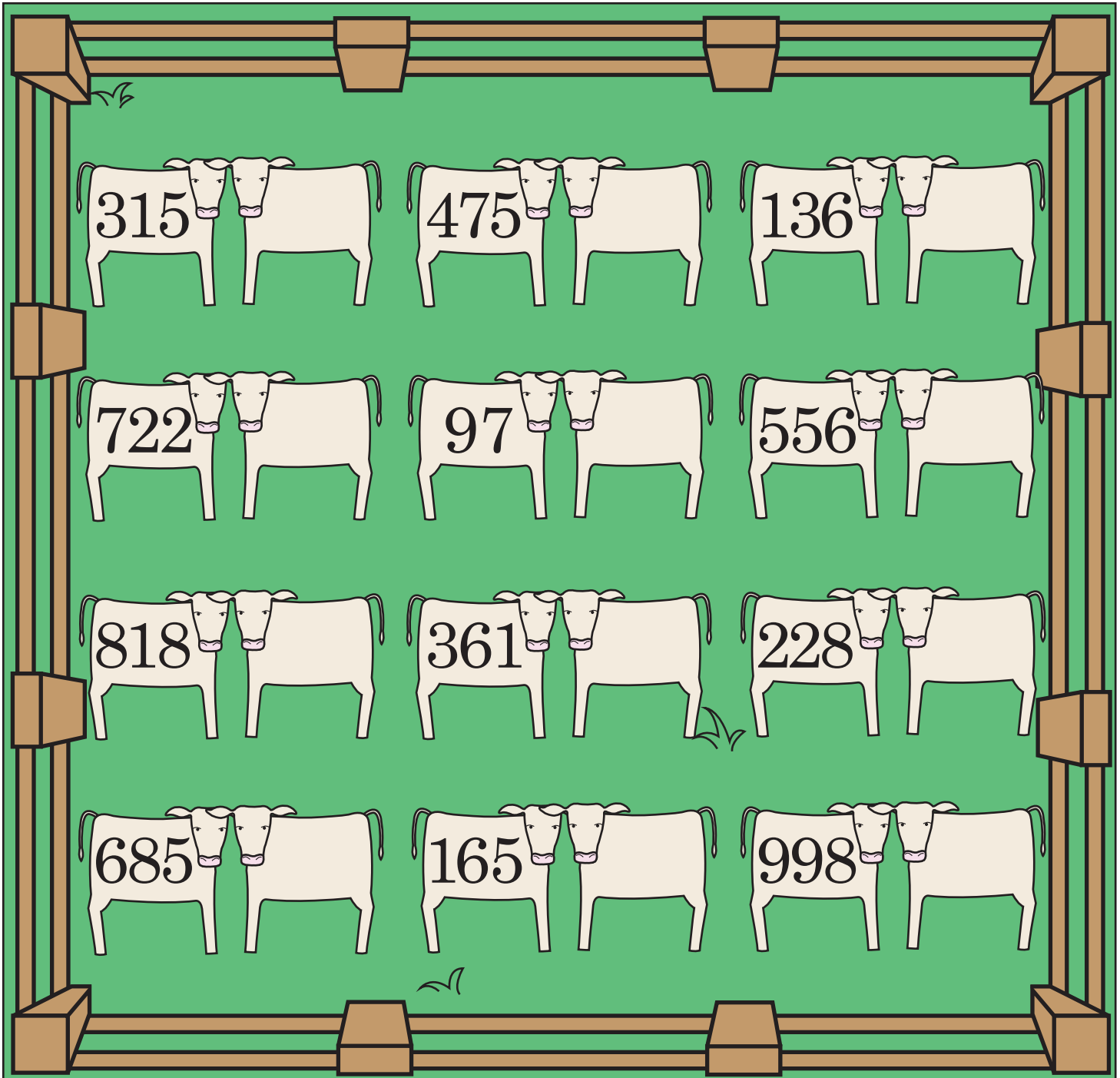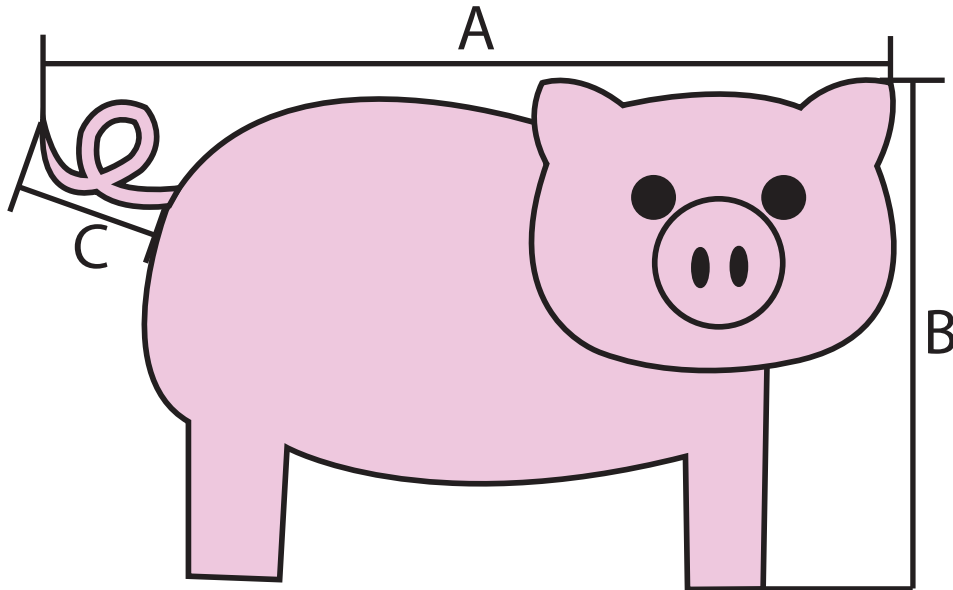Then use your ruler to measure to the nearest whole number.

A: How long do you think the pig is?   *Inches:* _____   *Centimeters:* _____

Using your ruler, how long is the pig?   *Inches:* _____   *Centimeters:* _____

B: How tall do you think the pig is?   *Inches:* _____   *Centimeters:* _____

Using your ruler, how tall is the pig?   *Inches:* _____   *Centimeters:* _____

C: How long do you think the pig's tail is?   *Inches:* _____   *Centimeters:* _____

Using your ruler, how long is the pig's tail?   *Inches:* _____   *Centimeters:* _____

A: How tall do you think the duck is?

Inches: _____   *Centimeters:* _____

Using your ruler, how tall is the duck?

Inches: _____   *Centimeters:* _____

B: How long do you think the duck's neck is?

Inches: _____   *Centimeters:* _____

Using your ruler, how long is the duck's neck?

Inches: _____   *Centimeters:* _____

MEASURING FOOD!

First guess how long you think the measurements are.
Then use your ruler to measure to the nearest whole number.

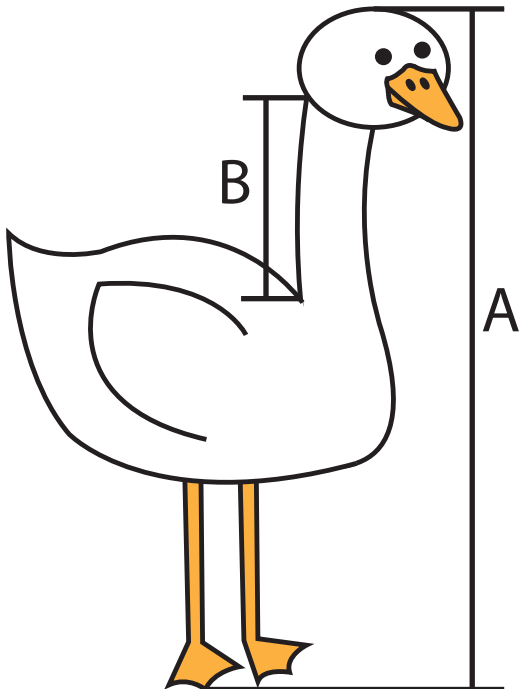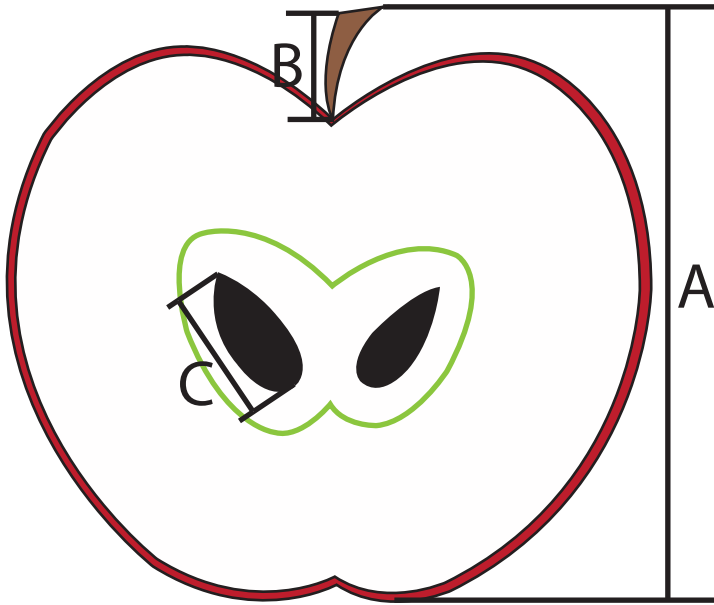A: How tall do you think the apple is?

Inches: _____   Centimeters: _____

Using your ruler, how tall is the apple?

Inches: _____   Centimeters: _____

B: How long do you think the apple stem is?

Inches: _____   Centimeters: _____

Using your ruler, how long is the apple stem?

Inches: _____   Centimeters: _____

C: How long do you think the apple seed is? Inches: _____   Centimeters: _____

Using your ruler, how long is the apple seed? Inches: _____   Centimeters: _____

A: How long do you think the peanut is?

Inches: _____   Centimeters: _____
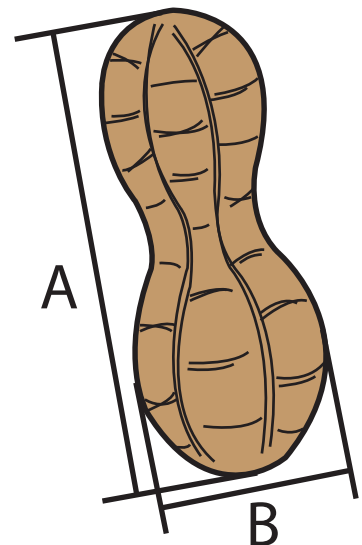
Using your ruler, how long is the peanut?

Inches: _____   Centimeters: _____

B: How wide do you think the peanut is?

Inches: _____   Centimeters: _____
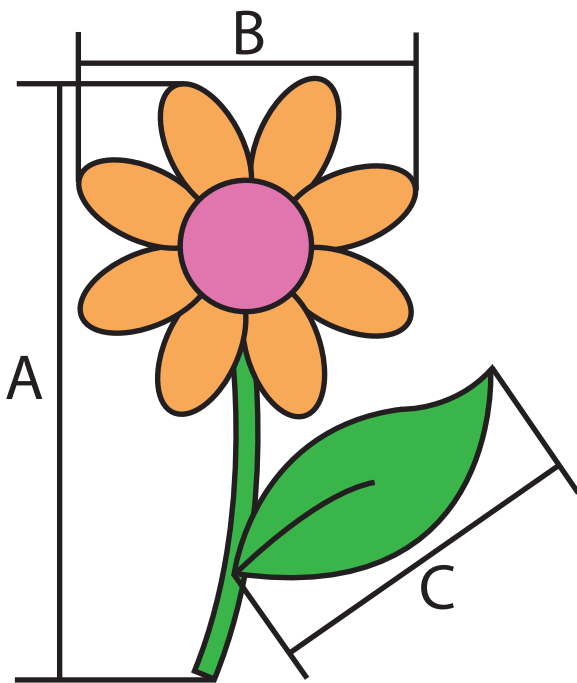
Using your ruler, how wide is the peanut?

Inches: _____   Centimeters: _____

MEASURING NATURE!

First guess how long you think the measurements are.
Then use your ruler to measure to the nearest whole number.

A: How tall do you think the flower is?

Inches: _____ *Centimeters:* _____

Using your ruler, how tall is the flower?

Inches: _____ *Centimeters:* _____

B: How wide do you think the flower is?

Inches: _____ *Centimeters:* _____

Using your ruler, how wide is the flower?

Inches: _____ *Centimeters:* _____

C: How long do you think the flower's leaf is?

Inches: _____ *Centimeters:* _____

Using your ruler, how long is the flower's leaf?

Inches: _____ *Centimeters:* _____

A: How tall do you think the tree is?

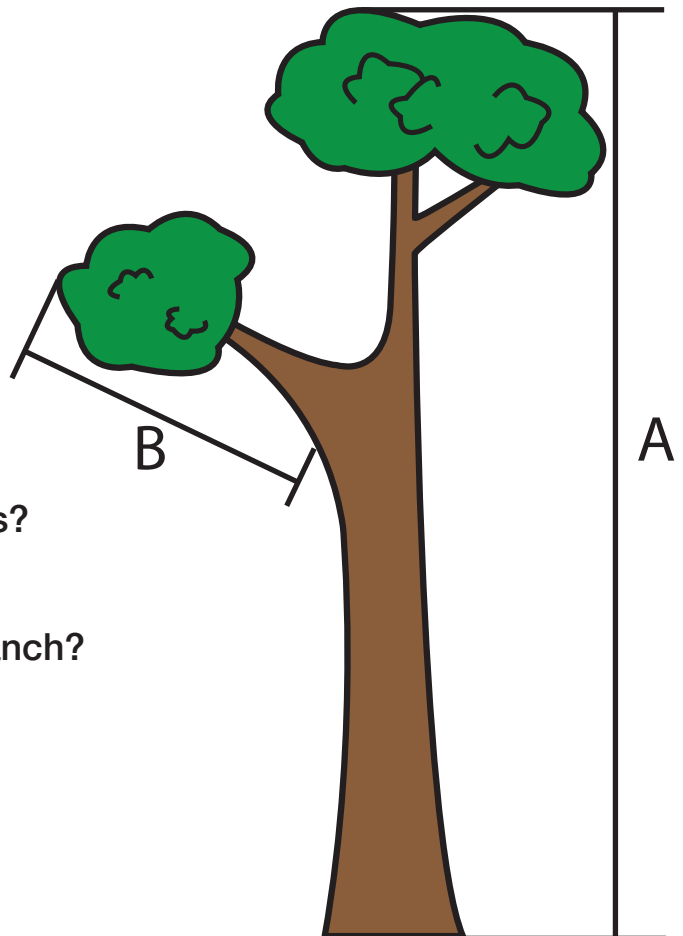*Inches:* _____ *Centimeters:* _____

Using your ruler, how tall is the tree?

Inches: _____ *Centimeters:* _____

B: How long do you think the tree branch is?

Inches: _____ *Centimeters:* _____

Using your ruler, how long is the tree branch?

Inches: _____ *Centimeters:* _____
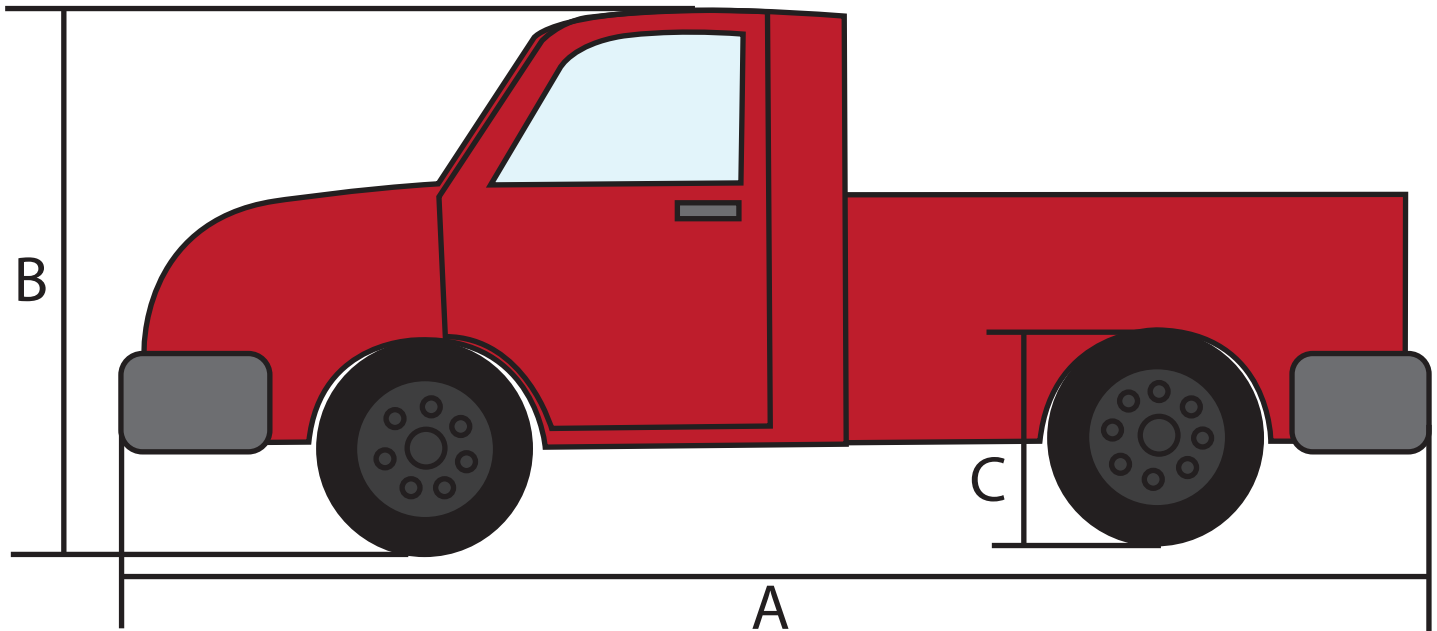
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MEASURING ON THE ROAD!

First guess how long you think the measurements are.
Then use your ruler to measure to the nearest whole number.

A: How long do you think the truck is?   *Inches:* _____   *Centimeters:* _____

Using your ruler, how long is the truck?   *Inches:* _____   *Centimeters:* _____

B: How tall do you think the truck is?   *Inches:* _____   *Centimeters:* _____

Using your ruler, how tall is the truck?   *Inches:* _____   *Centimeters:* _____

C: How tall do you think the truck's tire is?   *Inches:* _____   *Centimeters:* _____

Using your ruler, how tall is the truck's tire?   *Inches:* _____   *Centimeters:* _____

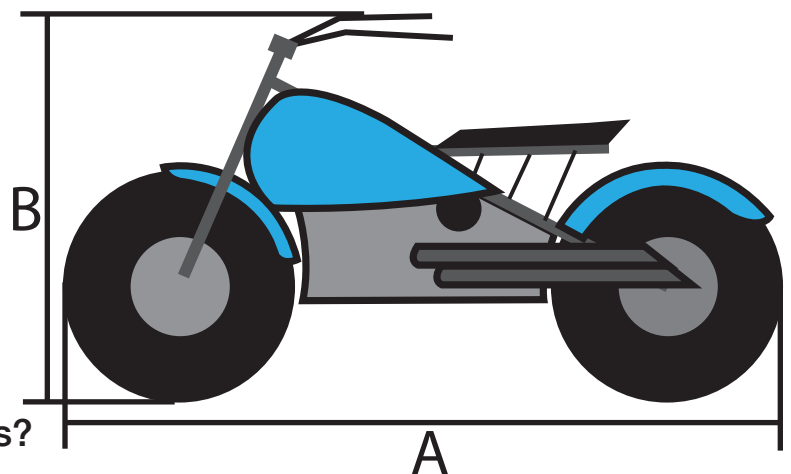A: How long do you think the motorcycle is?

Inches: _____   *Centimeters:* _____

Using your ruler, how long is the motorcycle?

Inches: _____   *Centimeters:* _____

B: How tall do you think the motorcycle is?

Inches: _____   *Centimeters:* _____

Using your ruler, how tall is the motorcycle?   *Inches:* _____   *Centimeters:* _____

MEASURING SPORTS!

First guess how long you think the measurements are.
Then use your ruler to measure to the nearest whole number.

A: How long do you think the football is?

Inches: _____   *Centimeters:* _____

Using your ruler, how long is the football?

Inches: _____   *Centimeters:* _____

B: How wide do you think the football is?

Inches: _____   *Centimeters:* _____

Using your ruler, how wide is the football?

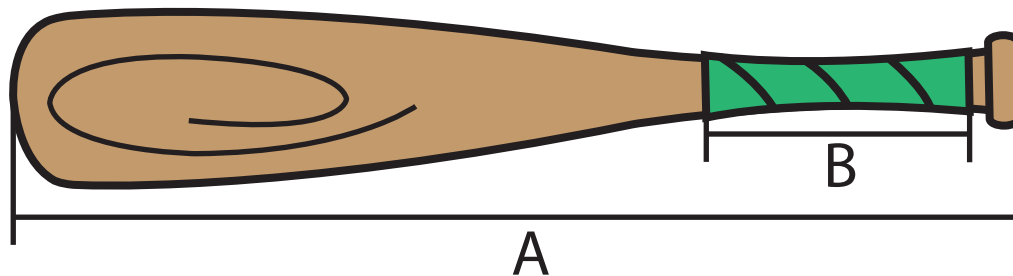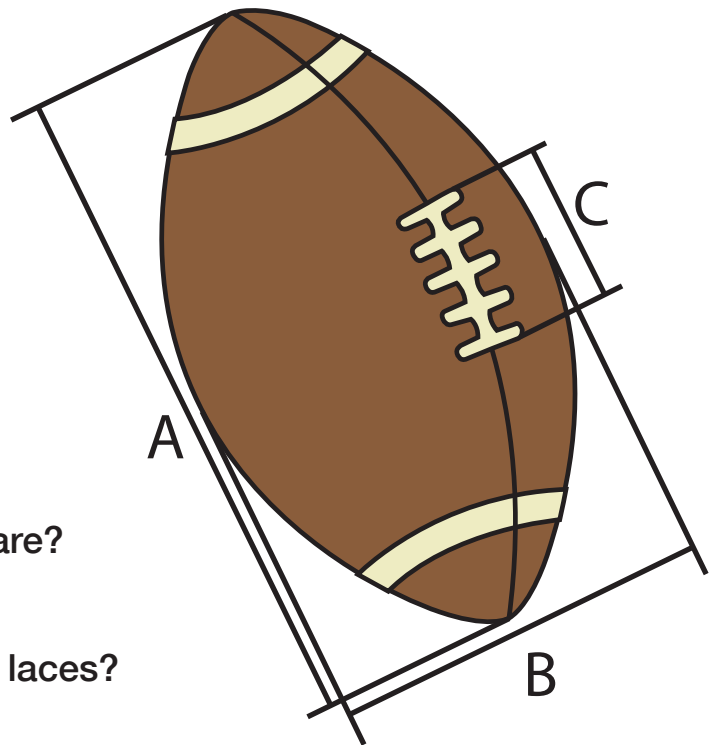*Inches:* _____   *Centimeters:* _____

C: How long do you think the football laces are?

Inches: _____   *Centimeters:* _____

Using your ruler, how long are the football laces?

Inches: _____   *Centimeters:* _____

A: How long do you think the baseball bat is?

Inches: _____   *Centimeters:* _____

Using your ruler, how long is the baseball bat?

Inches: _____   *Centimeters:* _____

B: How long do you think the baseball bat grip is?

Inches: _____   *Centimeters:* _____

Using your ruler, how long is the baseball bat grip?

Inches: _____   *Centimeters:* _____

Rounding and Subtracting

Estimating numbers makes you speedy! Round the numbers before subtracting. Remember, when rounding to the nearest ten:

If the number in the ones place is 5 or greater, round up to the nearest ten.
If the number in the ones place is 4 or less, round down to the nearest ten.
Example: 18 ➡ 20
14 ➡ 10

Example

89 − 11 = 90 − 10 = 80

77 − 51 = _____ = _____

54 − 20 = _____ = _____

19 − 12 = _____ = _____

74 − 57 = _____ = _____

96 − 65 = _____ = _____

49 − 34 = _____ = _____

52 − 27 = _____ = _____
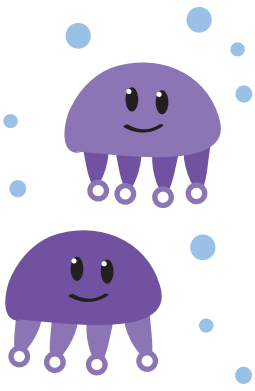
Rounding and Subtracting

Estimating numbers makes you speedy! Round the numbers before subtracting. Remember, when rounding to the nearest ten:

If the number in the ones place is 5 or greater, round up to the nearest ten.
If the number in the ones place is 4 or less, round down to the nearest ten.
Example: 18 ➡ 20
14 ➡ 10

Example

91 − 62 = | 90 − 60 | = | 30

65 − 24 = | | = | |

87 − 66 = | | = | |

70 − 52 = | | = | |

98 − 89 = | | = | |

83 − 71 = | | = | |

99 − 20 = | | = | |

42 − 33 = | | = | |
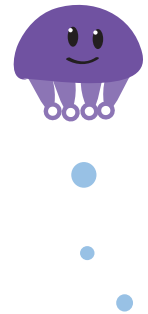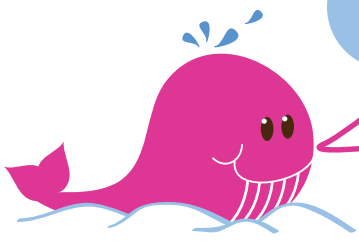
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Rounding and Subtracting

Estimating numbers makes you speedy! Round the numbers before subtracting. Remember, when rounding to the nearest ten:

If the number in the ones place is 5 or greater, round up to the nearest ten.
If the number in the ones place is 4 or less, round down to the nearest ten.
Example: 18 ➡ 20
14 ➡ 10

Example

78 − 15 = 80 − 20 = 60

56 − 50 =   =

88 − 14 =   =

96 − 90 =   =

37 − 15 =   =

78 − 13 =   =

99 − 37 =   =

57 − 24 =   =

Estimate the sums by rounding the numbers to the nearest hundred first and then adding them together. Don't forget to show your work!

Estimate the Sum

$$
\begin{array}{r} 210 \\ +378 \\ \hline \end{array}
\rightarrow
\begin{array}{r} 200 \\ +\;400 \\ \hline 600 \end{array}
$$

$$
\begin{array}{r} 128 \\ +413 \\ \hline \end{array}
\rightarrow
\begin{array}{r} \\ +\;\underline{\hspace{1.5cm}} \end{array}
$$

$$
\begin{array}{r} 684 \\ +245 \\ \hline \end{array}
\rightarrow
\begin{array}{r} \\ +\;\underline{\hspace{1.5cm}} \end{array}
$$

$$
\begin{array}{r} 321 \\ +518 \\ \hline \end{array}
\rightarrow
\begin{array}{r} \\ +\;\underline{\hspace{1.5cm}} \end{array}
$$

$$
\begin{array}{r} 467 \\ +376 \\ \hline \end{array}
\rightarrow
\begin{array}{r} \\ +\;\underline{\hspace{1.5cm}} \end{array}
$$

$$
\begin{array}{r} 850 \\ +105 \\ \hline \end{array}
\rightarrow
\begin{array}{r} \\ +\;\underline{\hspace{1.5cm}} \end{array}
$$

$$
\begin{array}{r} 941 \\ +223 \\ \hline \end{array}
\rightarrow
\begin{array}{r} \\ +\;\underline{\hspace{1.5cm}} \end{array}
$$

$$
\begin{array}{r} 754 \\ +285 \\ \hline \end{array}
\rightarrow
\begin{array}{r} \\ +\;\underline{\hspace{1.5cm}} \end{array}
$$

Sweet Estimation

Estimate the sum by rounding each **number** to the **nearest hundred**. Show your work!

189 ⟶ 200 + 334 ⟶ + 300 ⎯⎯⎯⎯⎯ 500	441 ⟶ _____ + 323 ⟶ + _____	252 ⟶ _____ + 368 ⟶ + _____
363 ⟶ _____ + 429 ⟶ + _____	598 ⟶ _____ + 176 ⟶ + _____	625 ⟶ _____ + 238 ⟶ + _____
324 ⟶ _____ + 150 ⟶ + _____	716 ⟶ _____ + 202 ⟶ + _____	137 ⟶ _____ + 381 ⟶ + _____
681 ⟶ _____ + 99 ⟶ + _____	528 ⟶ _____ + 145 ⟶ + _____	848 ⟶ _____ + 136 ⟶ + _____
463 ⟶ _____ + 276 ⟶ + _____	701 ⟶ _____ + 163 ⟶ + _____	648 ⟶ _____ + 220 ⟶ + _____

Magical Math

Estimate the difference by rounding each number to the **nearest hundred**. Show your work!

608 → **600** − 372 → − **400** **200**	481 → _____ − 115 → − _____	225 → _____ − 88 → − _____
797 → _____ − 273 → − _____	321 → _____ − 148 → − _____	507 → _____ − 284 → − _____
834 → _____ − 375 → − _____	654 → _____ − 283 → − _____	253 → _____ − 72 → − _____
449 → _____ − 132 → − _____	363 → _____ − 180 → − _____	883 → _____ − 329 → − _____
719 → _____ − 285 → − _____	917 → _____ − 432 → − _____	692 → _____ − 231 → − _____

Front-End Estimation

Front-end estimation only uses the numbers in the very left column.
If you are working with a 2 digit number, you will round to the nearest tens place, and if you are working with a 3 digit number, you will round to the nearest hundreds place.

Examples:

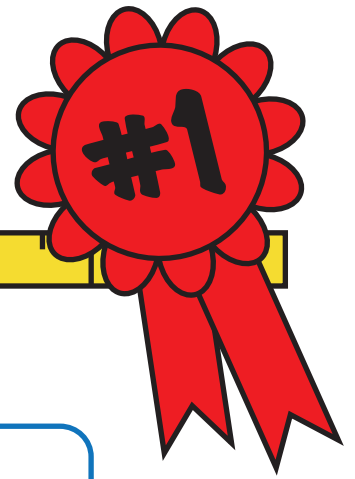$$\begin{array}{r} 42 \\ +17 \\ \hline \end{array} \rightarrow \begin{array}{r} 40 \\ +20 \\ \hline 60 \end{array} \qquad \begin{array}{r} 263 \\ -119 \\ \hline \end{array} \rightarrow \begin{array}{r} 300 \\ -100 \\ \hline 200 \end{array}$$

$$\begin{array}{r} 75 \\ +12 \\ \hline \end{array} \rightarrow +\underline{\quad} \qquad \begin{array}{r} 96 \\ +35 \\ \hline \end{array} \rightarrow +\underline{\quad} \qquad \begin{array}{r} 42 \\ +56 \\ \hline \end{array} \rightarrow +\underline{\quad} \qquad \begin{array}{r} 87 \\ +23 \\ \hline \end{array} \rightarrow +\underline{\quad}$$

$$\begin{array}{r} 63 \\ -37 \\ \hline \end{array} \rightarrow -\underline{\quad} \qquad \begin{array}{r} 58 \\ -21 \\ \hline \end{array} \rightarrow -\underline{\quad} \qquad \begin{array}{r} 93 \\ -85 \\ \hline \end{array} \rightarrow -\underline{\quad} \qquad \begin{array}{r} 27 \\ -16 \\ \hline \end{array} \rightarrow -\underline{\quad}$$

$$\begin{array}{r} 563 \\ +315 \\ \hline \end{array} \rightarrow +\underline{\quad} \qquad \begin{array}{r} 231 \\ +447 \\ \hline \end{array} \rightarrow +\underline{\quad} \qquad \begin{array}{r} 612 \\ +289 \\ \hline \end{array} \rightarrow +\underline{\quad} \qquad \begin{array}{r} 876 \\ +126 \\ \hline \end{array} \rightarrow +\underline{\quad}$$

$$\begin{array}{r} 792 \\ -134 \\ \hline \end{array} \rightarrow -\underline{\quad} \qquad \begin{array}{r} 949 \\ -381 \\ \hline \end{array} \rightarrow -\underline{\quad} \qquad \begin{array}{r} 417 \\ -199 \\ \hline \end{array} \rightarrow -\underline{\quad} \qquad \begin{array}{r} 650 \\ -511 \\ \hline \end{array} \rightarrow -\underline{\quad}$$

Round and Add!

Round the numbers to the nearest tens and then add them together!

#1

$21 \rightarrow \bigcirc + 45 \rightarrow \bigcirc = \boxed{}$

$37 \rightarrow \bigcirc + 52 \rightarrow \bigcirc = \boxed{}$

$91 \rightarrow \bigcirc + 13 \rightarrow \bigcirc = \boxed{}$

$68 \rightarrow \bigcirc + 72 \rightarrow \bigcirc = \boxed{}$

Round and Add!

Round the numbers to the nearest tens and then add them together!

#2

86 → ◯ + 34 → ◯ = ▭

59 → ◯ + 18 → ◯ = ▭

61 → ◯ + 26 → ◯ = ▭

97 → ◯ + 48 → ◯ = ▭

Round and Add!

Round the numbers to the nearest hundreds and then add them together!

165 ⟶ ◯ + 314 ⟶ ◯ = ▭

589 ⟶ ◯ + 218 ⟶ ◯ = ▭

824 ⟶ ◯ + 487 ⟶ ◯ = ▭

714 ⟶ ◯ + 627 ⟶ ◯ = ▭

Great job!

_____

is an ThuVienTiengAnh.Com math superstar