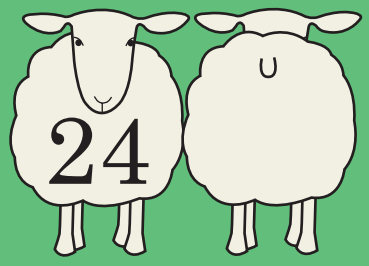
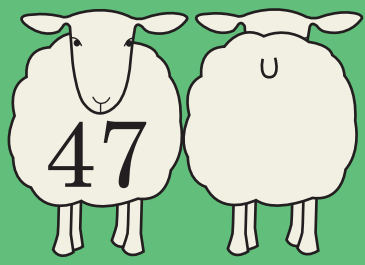
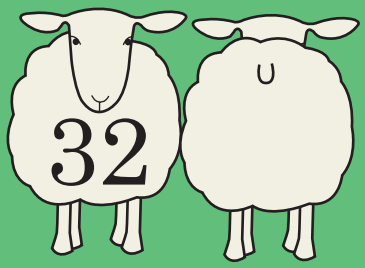
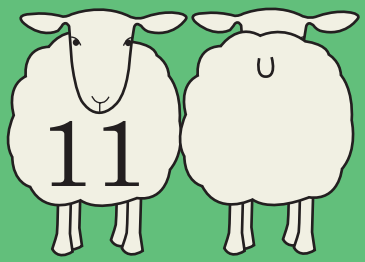
Rounding and Estimation

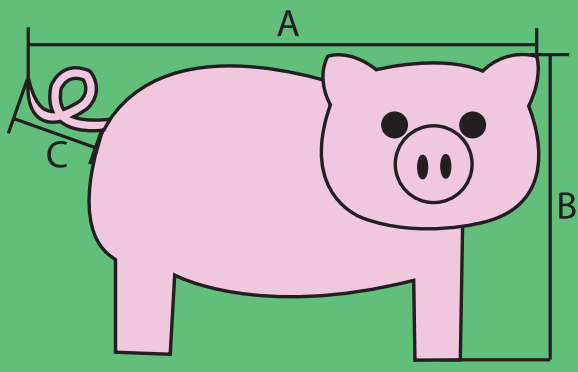
2nd GRADE











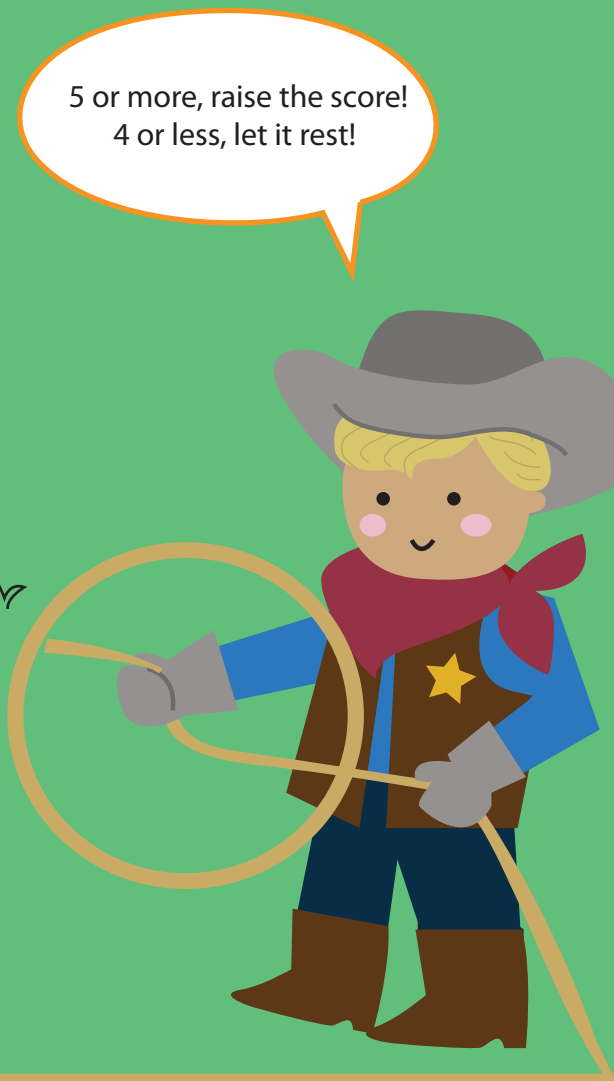


Table of Contents

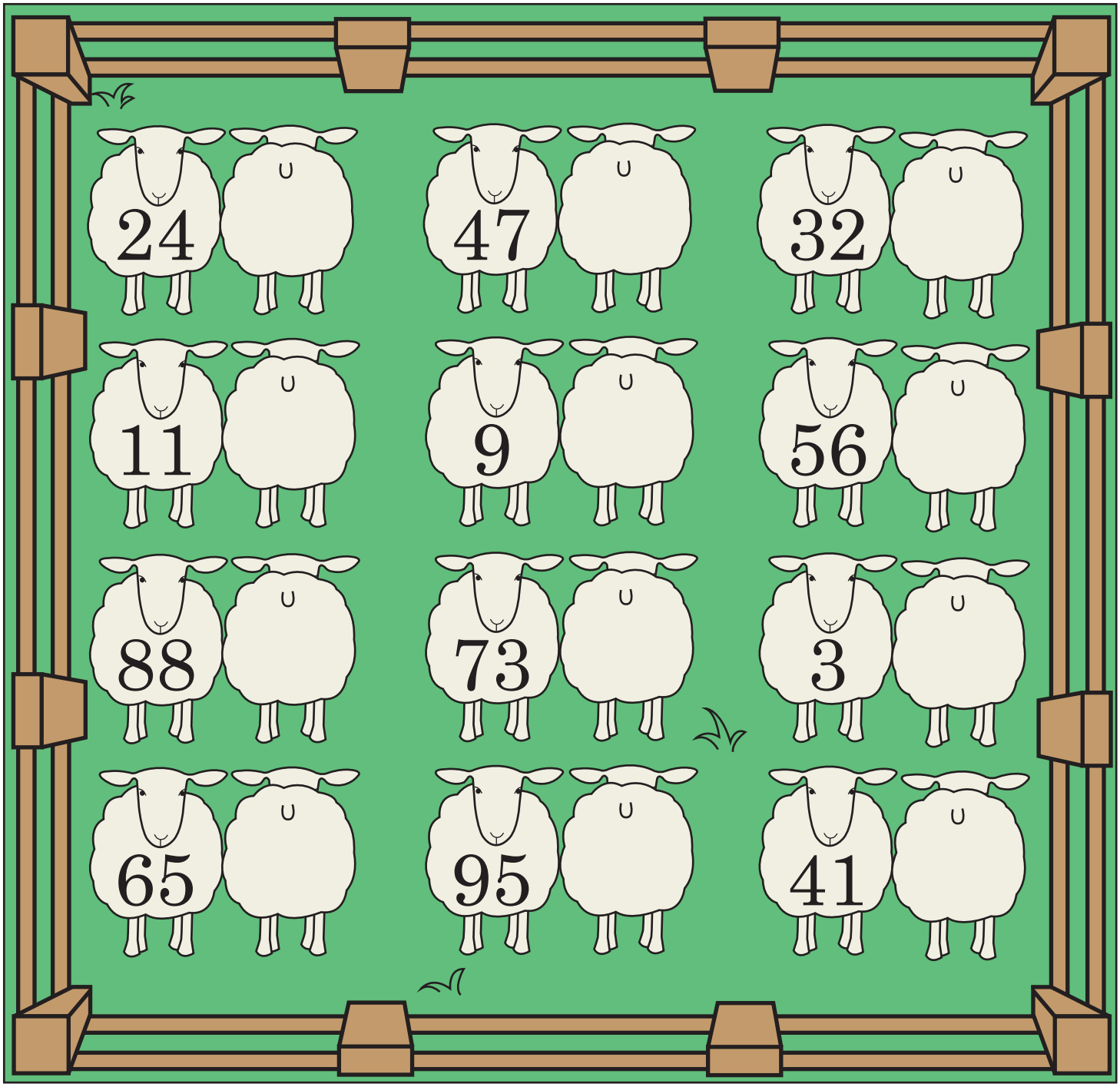
Rounding and Estimation

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



Round 'Em Up!

Round the numbers to the nearest ten.

Rounding to the nearest ten

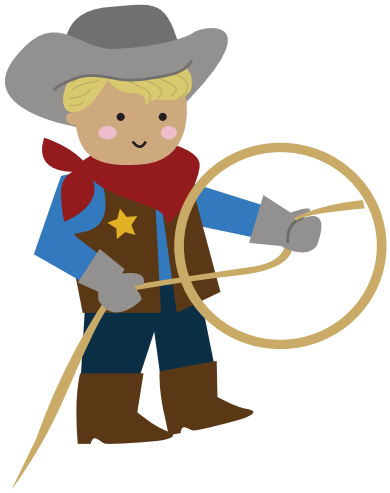
If the **ones** number is **5** or greater, **round up** to the **nearest ten**. Example: 17 → 20
If the **ones** number is **4** or less, **round down** to the **nearest ten**. Example: 12 → 10

56 60	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: 161 → 200
If the **tens** number is **4** or less, **round down** to the **nearest hundred**. Example: 118 → 100

486 500	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:

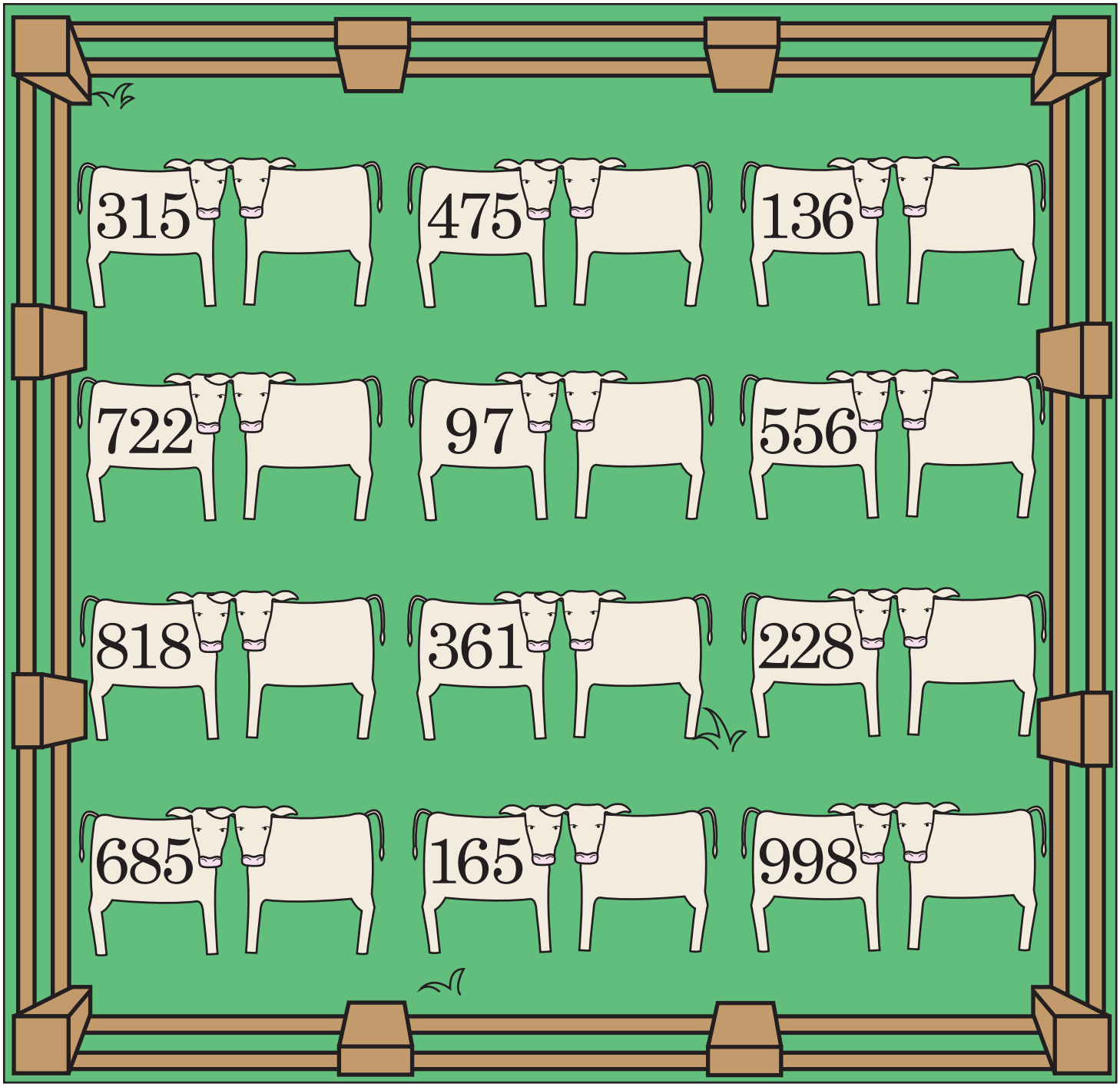
5 or more, raise the score
4 or less, let it rest

Wild ~~Round Up~~

Round the numbers to the nearest 100.

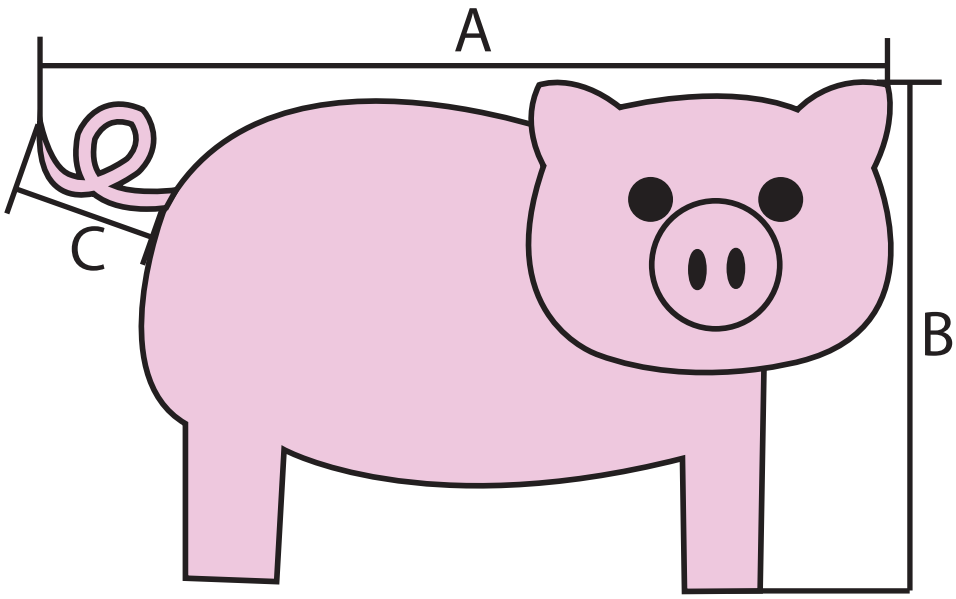
If the **tens** number is 5 or greater, round up to the nearest 100.
If the **tens** number is 4 or less, round down to the nearest 100.

1<u>8</u>5 → 200 1<u>3</u>6 → 100



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:*** _____

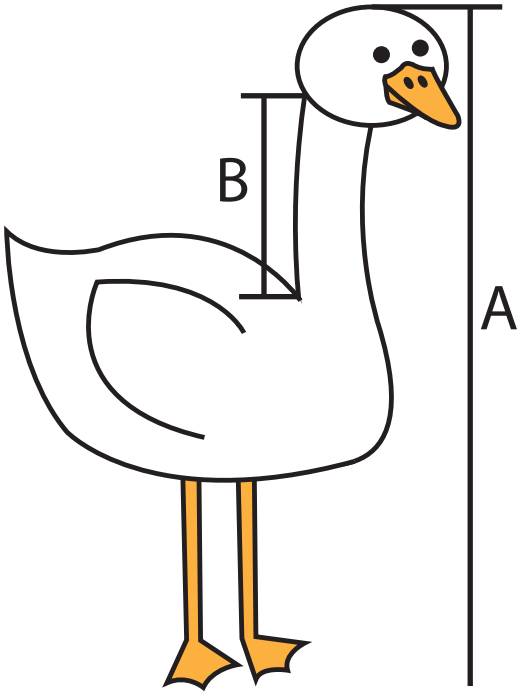
Using your ruler, how long is the pig? ***Inches:*** _____ ***Centimeters:*** _____

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?

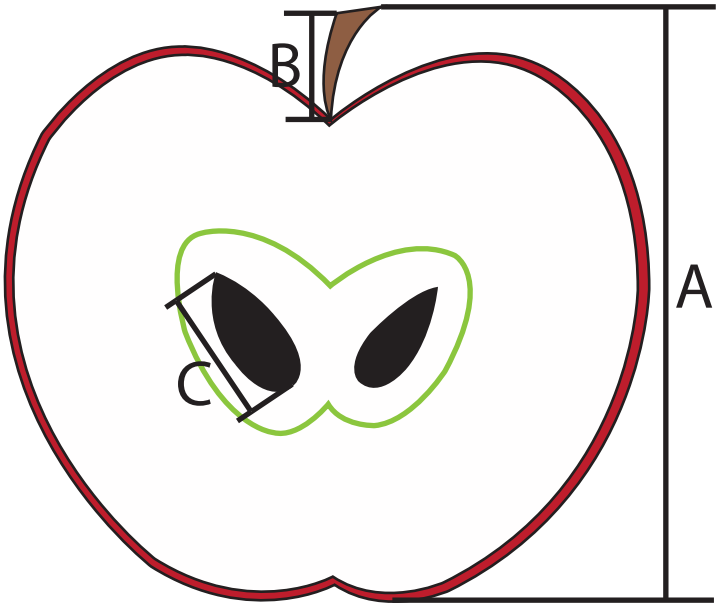
Inches: _____ ***Centimeters:*** _____

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?

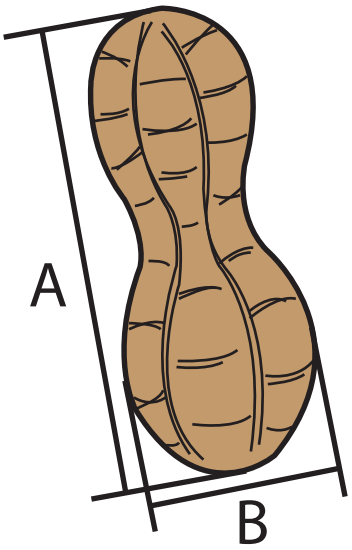
Inches: _____ ***Centimeters:*** _____

B: How wide do you think the peanut is?

Inches: _____ ***Centimeters:*** _____

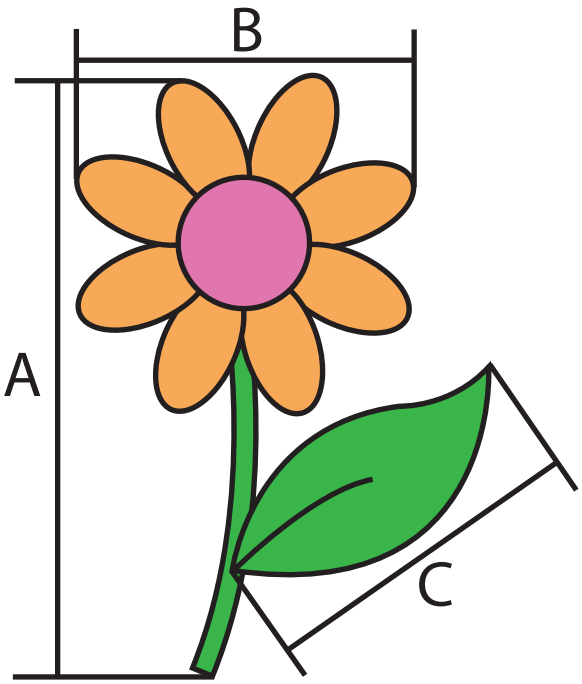
Using your ruler, how wide is the peanut?

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?

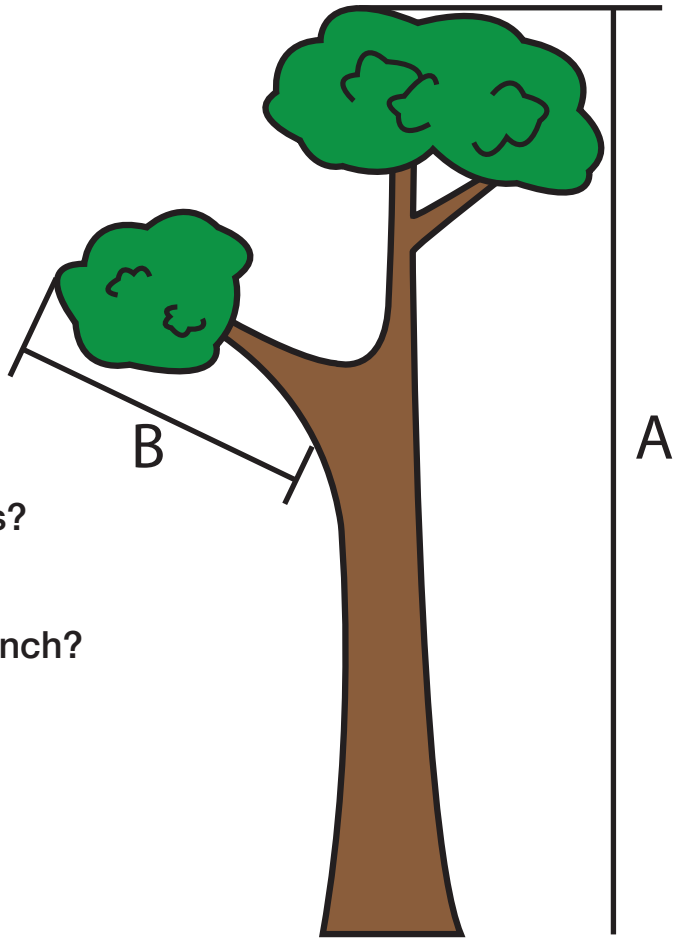
Inches: _____ ***Centimeters:*** _____

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?

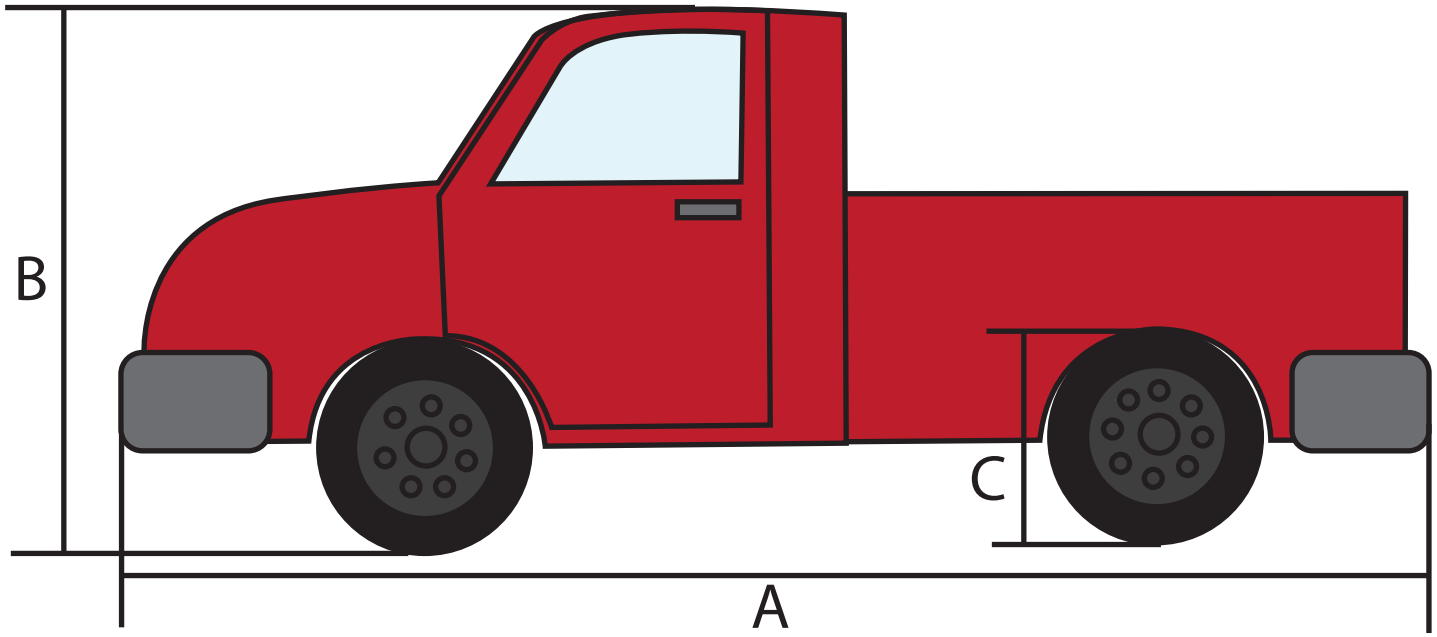
Inches: _____ ***Centimeters:*** _____

Using your ruler, how long is the tree branch?

Inches: _____ ***Centimeters:*** _____

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:*** _____

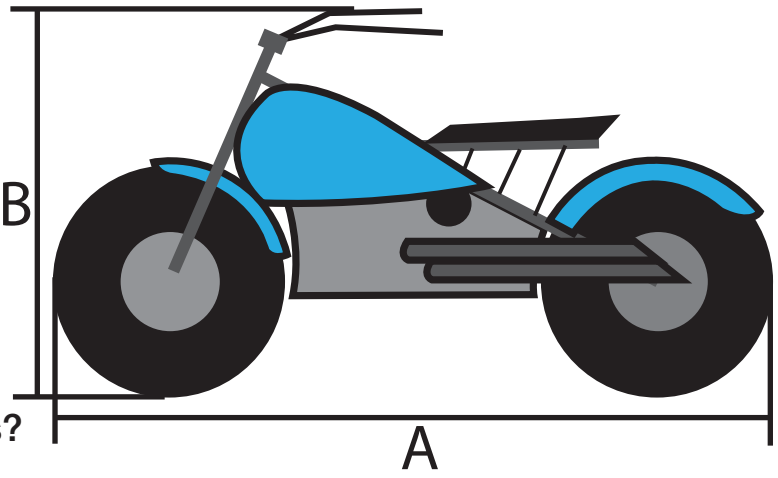
Using your ruler, how tall is the truck's tire? ***Inches:*** _____ ***Centimeters:*** _____

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?

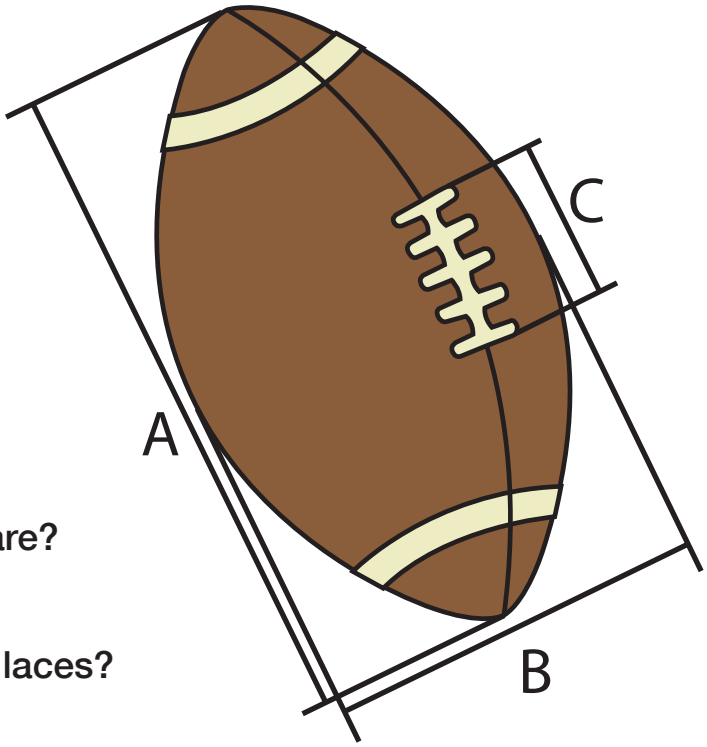
Inches: _____ ***Centimeters:*** _____

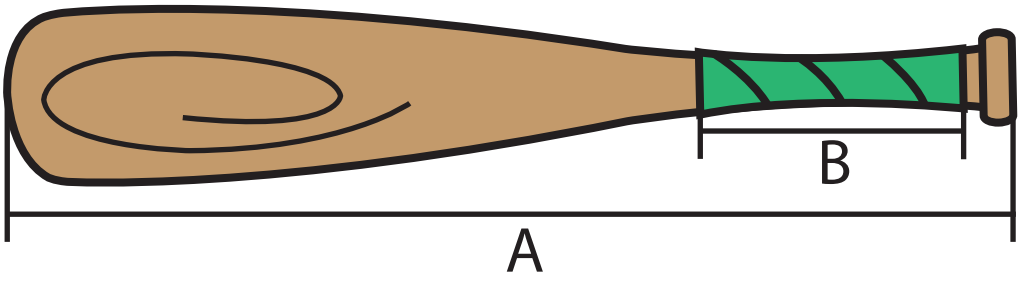
C: How long do you think the football laces are?

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:***

Grade 2

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 = ____ = ____

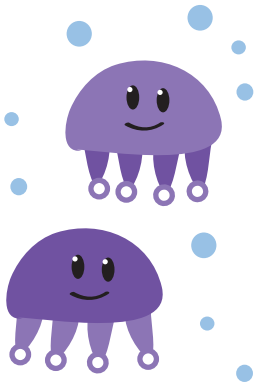
19 − 12 = ____ = ____

74 − 57 = ____ = ____

96 − 65 = ____ = ____

49 − 34 = ____ = ____

52 − 27 = ____ = ____



Grade 2

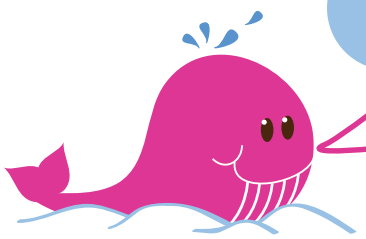
Rounding and Subtracting

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 =		=	



Grade 2

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

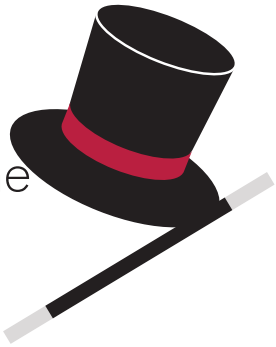
210 → 200 +378 → +400 600	128 → +413 → +
684 → +245 → +	321 → +518 → +
467 → +376 → +	850 → +105 → +
941 → +223 → +	754 → +285 → +

Sweet Estimation

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

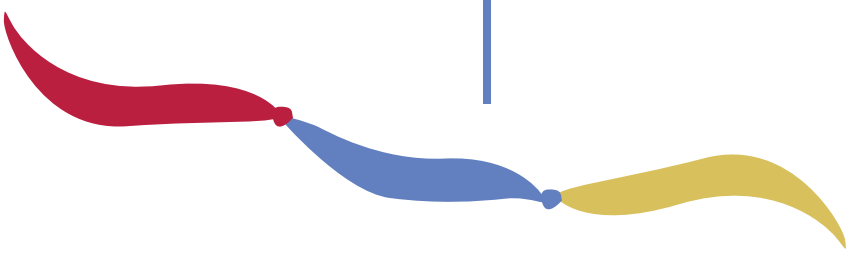
189 → 200 + 334 → + 300 500	441 → ____ + 323 → + ____	252 → ____ + 368 → + ____
363 → ____ + 429 → + ____	598 → ____ + 176 → + ____	625 → ____ + 238 → + ____
324 → ____ + 150 → + ____	716 → ____ + 202 → + ____	137 → ____ + 381 → + ____
681 → ____ + 99 → + ____	528 → ____ + 145 → + ____	848 → ____ + 136 → + ____
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:

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

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

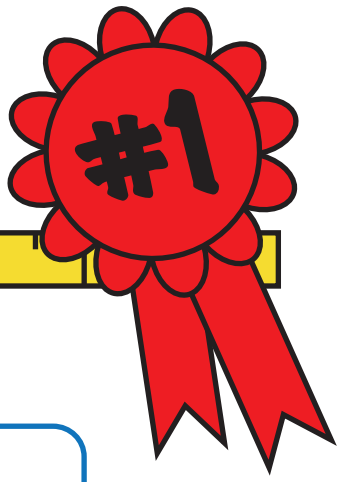
$$\begin{array}{r} 63 \\ -37 \\ \hline \end{array} \rightarrow \begin{array}{r} - \\ \_\_\_\_ \end{array} \qquad \begin{array}{r} 58 \\ -21 \\ \hline \end{array} \rightarrow \begin{array}{r} - \\ \_\_\_\_ \end{array} \qquad \begin{array}{r} 93 \\ -85 \\ \hline \end{array} \rightarrow \begin{array}{r}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

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

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

Round and Add!

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



21 + 45 =

37 + 52 =

91 + 13 =

68 + 72 =

Round and Add!

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

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!