Estimate It!

Printable Estimation Activity

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REV0825

Estimating can save us time and help us plan. It can even save us money! Estimating isn't a wild guess—it takes some thought and practice.

Practice your estimating skills with these real-life problems. Try to estimate using mental math. Before you move on to the next question, think, "Does this estimate make sense?"

1) This year, you want to plant a row of beans in your garden. The row is 78 inches long, and you need to plant the seeds 4 inches apart. About how many seeds will you need? If you buy a pack of 20 seeds, will it be enough? We have three numbers here, but you probably only need to round one of them. Round the one that will make it easier to use mental math.

Estimate ~ _____ seeds

Will a pack of 20 seeds be enough? _____

2) You have 356 pages left in the book you have been reading. Each night, you read 11 pages. About how many nights will it take you to finish reading the book?

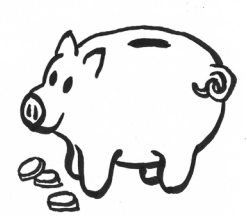
Estimate ~ _____ nights

3) You found some stepping stones for making a path to your treehouse. Your path will have three parts: through the yard is 82 inches, through the flower garden is 97 inches, and through the field is 68 inches. You only need a good-enough estimate of how long the path is, in case you need to find more stones. Round each number to the tens place to find approximately how long your path will be.

Estimate ~ _____ inches

4) Your brother has collected 306 pennies, your sister has 229, and you have 414 pennies. That is a lot of pennies! Instead of adding, you decide to estimate how many pennies you have all together. Since we don't need an exact number, this is a great time to try using front-end estimation.

Estimate ~ _____ pennies



5) You want to make a bracelet for your sister's birthday. You have $2.00 to spend. The 4 charms you choose cost: $0.56, $0.42, $0.48, and $0.39. Oh, wow! Do you need to add every cent together? Thankfully, you can estimate by rounding! Round each number to the nearest ten cents, then add them together. Will $2 be enough?

Estimate ~ $ _____

Will $2 be enough? _____

6) At the store, your favorite yogurt cups are on sale for $0.66 each. A pack of four costs $2.40. Hmmm, which one is the better price? To find out, estimate the cost of four single yogurt cups. Then compare that to the price of the 4-pack. Is the 4-pack a better price?

Estimate ~ $ _____

Is the 4-pack a better price? _____

Can you think of another time when estimating would be a faster way to calculate a close-enough answer?

_____

_____

If your student's answer does not make sense, ask them how they could check their estimate in that scenario. Some answers have extension questions you can ask your student to deepen their understanding.

1) This year, you want to plant a row of beans in your garden. The row is 78 inches long, and you need to plant the seeds 4 inches apart. About how many seeds will you need? If you buy a pack of 20 seeds, will it be enough? We have three numbers here, but you probably only need to round one of them. Round the one that will make it easier to use mental math.

Round 78 inches up to 80, then divide by 4 using mental math.

80 ÷ 4 = 20

Estimate ~ 20 seeds
Will a pack of 20 seeds be enough? yes

2) You have 356 pages left in the book you have been reading. Each night, you read 11 pages. About how many nights will it take you to finish reading the book?

Round 356 up to 360 and 11 down to 10.

360 ÷ 10 = 36

Estimate ~ 36 nights

***Ask your student: If you love reading and want to finish the book in 3 weeks (21 nights), about how many pages would you need to read each night?**
Estimate 350 ÷ 20 = 17.5 = ~18 pages
Exact Answer 356 ÷ 21 = 16.95 = ~17 pages

3) You found some stepping stones for making a path to your treehouse. Your path will have three parts: through the yard is 82 inches, through the flower garden is 97 inches, and through the field is 68 inches. You only need a good-enough estimate of how long the path is, in case you need to find more stones. Round each number to the tens place to find approximately how long your path will be.

Round the numbers and add.

Estimate ~ 250 inches

***Ask your student: If your stepping stones are each about 11 inches across, about how many will you need for your path?**
Estimate 250 ÷ 10 = ~25 stones

4) Your brother has collected 306 pennies, your sister has 229, and you have 414 pennies. That is a lot of pennies! Instead of adding, you decide to estimate how many pennies you have all together. Since we don't need an exact number, this is a great time to try using front-end estimation.

For front-end estimation, use the highest (left-most) place-value number and replace all others with zeroes.

$$\begin{array}{r} 300 \\ 200 \\ +\ 400 \\ \hline 900 \end{array}$$

Estimate ~ 900 pennies

***Ask your student: About how many dollars is that? $9.00! Those pennies added up!**

5) You want to make a bracelet for your sister's birthday. You have $2.00 to spend. The 4 charms you choose cost: $0.56, $0.42, $0.48, and $0.39. Oh, wow! Do you need to add every cent together? Thankfully, you can estimate by rounding! Round each number to the nearest ten cents, then add them together. Will $2 be enough?

Round the prices and add.

Estimate ~ $ 1.90
Will $2 be enough? yes

$$\begin{array}{r} 0.60 \\ 0.40 \\ 0.50 \\ +\ 0.40 \\ \hline \$1.90 \end{array}$$

6) At the store, your favorite yogurt cups are on sale for $0.66 each. A pack of four costs $2.40. Hmmm, which one is the better price? To find out, estimate the cost of four single yogurt cups. Then compare that to the price of the 4-pack. Is the 4-pack a better price?

Round 0.66 up to 0.70 and multiply.

Estimate ~ $ 2.80
Is the 4-pack a better price? yes

$$\begin{array}{r} 0.70 \\ \times\ 4 \\ \hline \$2.80 \end{array}$$

Can you think of another time when estimating would be a faster way to calculate a close-enough answer?

Sample answer: You can use estimation when trying to figure out how many people will eat hamburgers at a barbecue, approximately how many baseball cards are in your collection, etc.