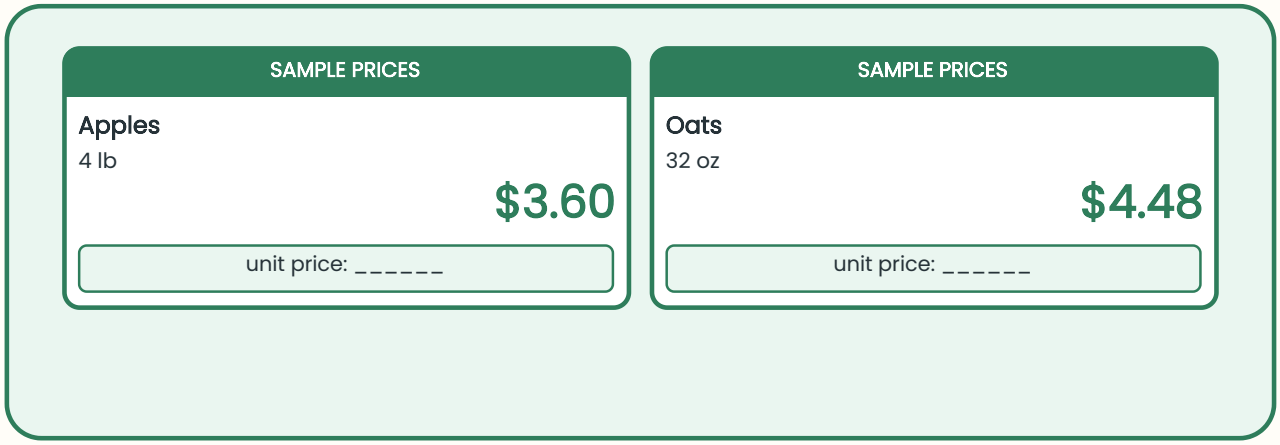
FREE STARTER

GRADES 4–6

Grocery Store Math: Unit Prices, Budgets, Deals, and Change

6 activities on package sizes and unit prices, two from each level, each with a worked answer. Activity numbers match the full collection, which also covers budgets, change, coupons and receipts.



HOW TO USE

1. Start with Level 1 and move up as your child is ready.
2. Level 3 uses percents and decimal unit prices.
3. Use the prices shown; add tax only when a page gives a rule.
4. Try It at the bottom of each page; use extra paper if needed.

6 activities • 3 answer pages • From the 28-activity collection

10 US Letter pages • Print at 100% / Actual Size

Original Bobotemp educational printable • Fictional names, places and prices

Name _____ Date _____

Shelf Tag Detective: The Blank Tag

LEVEL 1 ●○○

Read the shelf tag. Find the cost of one pound. Show your work.

At Maple Street Market, a bag of apples has a shelf tag. The tag shows the bag size and the total price. The space for the unit price is blank. Help the store worker fill it in. What does one pound of apples cost when you buy this bag?

MAPLE STREET MARKET

Apples

4 lb bag

$3.60

unit price: _____

EVIDENCE TO USE

- Store: Maple Street Market (sample prices)
- Bag of apples: 4 pounds
- Total price: $3.60
- Unit price = total price ÷ number of pounds

1. Write $3.60 as cents.

2. Divide by 4 to find the price of 1 pound.

3. Write the unit price for the blank tag.

TRY IT • A 3-pound bag of onions costs $2.85. What is the unit price per pound?

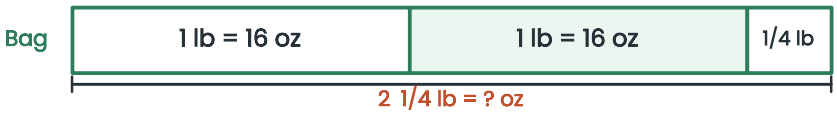
Name _____ Date _____

Ounces or Pounds? The Recipe Check

LEVEL 1 ●○○

Change pounds to ounces. Then decide if there is enough.

Ana is shopping for a class cooking project at Corner Fresh. Her recipe needs 30 ounces of lentils. The bag she found is labeled in pounds, not ounces. Is one bag enough for the recipe? How many ounces are in the bag?



EVIDENCE TO USE

- Store: Corner Fresh (sample prices)
- Bag label: 2 1/4 pounds of lentils
- Recipe needs: 30 ounces
- 1 pound = 16 ounces

1. Find the ounces in 2 whole pounds.

2. Find the ounces in 1/4 pound.

3. Add, then compare the total to 30 ounces.

TRY IT • A bag of oats is labeled 1 1/2 pounds. How many ounces is that?

Name _____ Date _____

Better Buy Showdown: Cereal Boxes

LEVEL 2 ●●○

Find the price per ounce for each box. The lower unit price is the better buy.

Riverside Grocers sells the same cereal in two sizes. Jordan wants to know which box costs less for each ounce. Find each unit price in cents per ounce. Then name the better buy and explain your thinking.

RIVERSIDE GROCERS	RIVERSIDE GROCERS
Cereal, small box	Cereal, large box
12 oz	18 oz
$3.60	$4.86
unit price: _____	unit price: _____

EVIDENCE TO USE

- Store: Riverside Grocers (sample prices)
- Small box: 12 ounces for $3.60
- Large box: 18 ounces for $4.86
- Better buy = lower price per ounce

1. Find the price per ounce of the small box.

2. Find the price per ounce of the large box.

3. Name the better buy and tell how much it saves per ounce.

TRY IT • A 16-ounce jar costs $3.20. A 24-ounce jar costs $5.04. Which is the better buy?

Name _____ Date _____

Ounces or Pounds? Bag Versus Canister

LEVEL 2 ●●○

Make both sizes use ounces. Then compare the price per ounce.

Maple Street Market sells oats in a bag labeled in pounds and a canister labeled in ounces. You can't compare unit prices until both use the same unit. Which container has the lower price per ounce?

MAPLE STREET MARKET

Oats, bag

2 lb

$4.48

unit price: _____

MAPLE STREET MARKET

Oats, canister

42 oz

$5.46

unit price: _____

EVIDENCE TO USE

- Store: Maple Street Market (sample prices)
- Bag: 2 pounds for $4.48
- Canister: 42 ounces for $5.46
- 1 pound = 16 ounces

1. Change the bag size to ounces.

2. Find each price per ounce.

3. Name the better buy.

TRY IT • A 3-pound bag of flour costs $3.84. A 40-ounce bag costs $3.60. Which is the better buy?

Name _____ Date _____

Shelf Tag Detective: The Smudged Size

LEVEL 3 ●●●

Work backward from the unit price. Treat the printed unit prices as exact.

At Riverside Grocers, a cracker shelf tag is smudged. You can still read the price and the unit price, but not the box size. Find the missing size. A smaller box nearby shows its size and price, but its unit price is missing. Find it, then decide which box has the lower unit price.

RIVERSIDE GROCERS	RIVERSIDE GROCERS
Crackers, Tag A	Crackers, Tag B
size: ?? oz	13 oz
$5.22	$3.49
29.0¢ per oz	unit price: _____

EVIDENCE TO USE

- Store: Riverside Grocers (sample prices)
- Tag A: $5.22, unit price 29.0¢ per oz, size ??
- Tag B: 13 oz for $3.49, unit price ??
- Unit price = price ÷ ounces
- Rule: printed unit prices are exact; round Tag B's to the nearest tenth of a cent.

1. Find the size of the box on Tag A.

2. Find Tag B's unit price to the nearest tenth of a cent.

3. Which box has the lower unit price?

TRY IT • A tag shows $3.85 and 27.5¢ per ounce, but the size is smudged. What is the size?

Name _____ Date _____

Better Buy Showdown: The Bonus Pack

LEVEL 3 ●●●

Find the bonus pack size from the percent. Compare unit prices. Then think about need.

Corner Fresh sells a regular box of crackers and a bonus box with 25% more crackers. The bonus box also costs more. Which box has the lower price per ounce? Then explain one reason a family might still choose the other box.

CORNER FRESH	CORNER FRESH
Crackers, regular 20 oz $3.00 unit price: _____	Crackers, BONUS 25% more than 20 oz $3.60 unit price: _____

EVIDENCE TO USE

- Store: Corner Fresh (sample prices)
- Regular box: 20 oz for $3.00
- Bonus box: 25% more than 20 oz, for $3.60
- Better buy = lower price per ounce

1. Find the number of ounces in the bonus box.

2. Find both unit prices in cents per ounce.

3. Name the better buy. Give one reason someone might pick the other box.

TRY IT • A regular box is 12 oz for $2.40. A '50% more' box costs $3.78. Which has the lower unit price?

1. Shelf Tag Detective: The Blank Tag

LEVEL 1

The unit price is 90¢ ($0.90) per pound.

WORKED REASONING • $3.60 is 360 cents. The bag has 4 pounds, so share 360 cents into 4 equal parts: 360 ÷ 4 = 90. Check: 90 × 4 = 360. The tag should read $0.90 per pound.

WATCH FOR • Some students divide 4 by 3.60, or they write the total price as the unit price. The unit price is the cost of ONE pound, so the total price is split by the number of pounds.

TRANSFER • 285 ÷ 3 = 95, so the unit price is 95¢ ($0.95) per pound.

2. Ounces or Pounds? The Recipe Check

LEVEL 1

The bag holds 36 ounces, so it is enough. There will be 6 ounces left over.

WORKED REASONING • 2 pounds = 2 × 16 = 32 ounces. 1/4 of 16 ounces is 4 ounces. 32 + 4 = 36 ounces, which is the same as 2.25 × 16 = 36. Since 36 is more than 30, one bag is enough, and 36 - 30 = 6 ounces are left over.

WATCH FOR • Some students treat 2 1/4 pounds like 2.4 pounds, or they write 24 ounces by putting the 2 and the 4 side by side. These mistakes come from base-10 thinking. A pound has 16 ounces, not 10 or 100, so 1/4 pound is 16 ÷ 4 = 4 ounces. That makes 2 1/4 pounds = 2 pounds 4 ounces = 36 ounces.

TRANSFER • 16 + 8 = 24 ounces.

10. Better Buy Showdown: Cereal Boxes

LEVEL 2

The large 18-ounce box is the better buy at 27¢ per ounce, compared with 30¢ per ounce for the small box.

WORKED REASONING • Small: 360 ÷ 12 = 30 cents per ounce. Large: 486 ÷ 18 = 27 cents per ounce. Check: 18 × 27 = 486. The large box costs 3¢ less per ounce, so it is the better buy by unit price, even though its total price is higher.

WATCH FOR • Some students pick the small box because $3.60 is less than $4.86. The total price does not tell you the cost per ounce when the sizes are different.

TRANSFER • 16-ounce: 320 ÷ 16 = 20¢ per ounce. 24-ounce: 504 ÷ 24 = 21¢ per ounce. The 16-ounce jar is the better buy.

11. Ounces or Pounds? Bag Versus Canister

LEVEL 2

The 42-ounce canister is the better buy at 13¢ per ounce. The bag is 14¢ per ounce.

WORKED REASONING • Bag: 2 × 16 = 32 ounces. 448 ÷ 32 = 14 cents per ounce. Canister: 546 ÷ 42 = 13 cents per ounce. Check: 42 × 13 = 546. The canister costs 1¢ less per ounce.

WATCH FOR • Some students divide $4.48 by 2 and compare 224¢ per pound with 13¢ per ounce. Those units don’t match, so the comparison is not fair. Convert to the same unit first.

TRANSFER • 3 pounds = 48 ounces. 384 ÷ 48 = 8¢ per ounce and 360 ÷ 40 = 9¢ per ounce, so the 3-pound bag is the better buy.

19. Shelf Tag Detective: The Smudged Size

LEVEL 3

Tag A's box is 18 ounces. Tag B is about 26.8¢ per ounce, so the 13-ounce box has the lower unit price.

WORKED REASONING • Price ÷ size = unit price, so size = price ÷ unit price. 522 ÷ 29 = 18 ounces. Check: 18 × 29 = 522. Tag B: 349 ÷ 13 = 26.846..., which rounds to 26.8¢ per ounce. 26.8¢ is less than 29.0¢, so the smaller box has the lower unit price.

WATCH FOR • Some students multiply $5.22 by 29 to find the size. Unit price times size gives the total price, so the missing size is found by dividing. Another error is thinking a bigger box always has the lower unit price.

TRANSFER • 385 ÷ 27.5 = 14 ounces.

20. Better Buy Showdown: The Bonus Pack

LEVEL 3

The bonus box (25 oz) is the better buy at 14.4¢ per ounce, compared with 15.0¢ per ounce for the regular box. A family might still pick the regular box if they could not finish 25 oz before the crackers go stale, or if they have only $3.00 to spend. Accept any sensible need-based reason (for example, less storage space or a small household).

WORKED REASONING • 25% of 20 oz = 0.25 × 20 = 5 oz, so the bonus box holds 20 + 5 = 25 oz. Regular: 300 ÷ 20 = 15.0¢ per oz. Bonus: 360 ÷ 25 = 14.4¢ per oz. The bonus box costs 0.6¢ less per ounce. But if the crackers might go stale before the family finishes 25 oz, or if the family has only $3.00 to spend, the regular box could be the wiser choice. Also accept comparing the increases: the amount rises 25% but the price rises only 20%, so the bonus box has the lower unit price.

WATCH FOR • Some students assume that 25% more crackers always means a better unit price, without checking how much the price went up. If the price had gone up by more than 25%, the bonus box would cost more per ounce. Here the price went up 60¢, which is only 20% of $3.00, so the bonus box does win, but you have to compare unit prices to know.

TRANSFER • The bigger box holds 18 oz. 240 ÷ 12 = 20¢ and 378 ÷ 18 = 21¢, so the regular box is the better buy.