

• REAL-WORLD MATH • DIFFERENTIATED • CLASSROOM-READY

Unit Rate Grocery Challenge



Better Buy Task Cards — 32 Full-Color Cards + Self-Grading Boom Cards Deck with Student Data Reports

\$ Editable Price Tags

i Self-Checking Tabs

B Battle Bracket Format

4 4-Tier Differentiation

✓ Worked Solutions

FOUR DIFFERENTIATED TIERS • 8 CARDS EACH

01

Whole-Number Unit Rates

CARDS 1–8

02

Fractional Unit Rates

CARDS 9–16

03

Constant Speed Problems

CARDS 17–24

04

Multi-Step Better Buy

CARDS 25–32

WHAT'S INSIDE THIS PREMIUM MEGA UNIT

32 task cards • 4 recording sheets • Battle Bracket tournament • 3 exit tickets • CCSS alignment chart • full worked-solution answer key • Boom Cards digital deck • glossary • extension activities

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The diagram below shows the relationship between a ratio, a rate, and a unit rate. All three are ways of comparing two quantities, but they differ in their level of simplification. A ratio can compare any two quantities (even with the same units, like 3 red apples to 5 green apples). A rate always compares quantities with different units (like dollars to pounds). A unit rate is a rate reduced so the denominator is 1. Understanding these distinctions helps students recognize which kind of comparison a problem is asking for.



All unit rates are rates; all rates are ratios. The reverse is NOT true.

Hierarchy of comparison concepts in Grade 6 mathematics

Figure 1. The relationship between ratios, rates, and unit rates.

Three Fully Worked Examples

These three worked examples correspond to the three main problem types students will encounter in this resource. Work through each one aloud with your class before releasing students to independent practice. Each example shows the explicit reasoning that students should be able to articulate — not just the final numerical answer.

Example 1: Whole-Number Unit Rate (Tier 1 style)

Problem: At the farmer's market, a vendor sells 5 pounds of potatoes for \$10. What is the unit rate (price per pound)?

Step 1 — Identify the rate: \$10 / 5 pounds

Step 2 — Divide the numerator by the denominator: $\$10 \div 5 = \$2$

Step 3 — Write the unit rate with units: \$2 per pound

Step 4 — Interpret the result: Each pound of potatoes costs \$2. If you wanted to buy 3 pounds, you would pay \$6.

Example 2: Fractional Unit Rate (Tier 2 style)

Problem: A deli sells $\frac{1}{2}$ pound of cheese for \$3. What is the unit rate (price per whole pound)?

Step 1 — Identify the rate: $\$3 / (\frac{1}{2}) \text{ pound}$

Step 2 — To divide by a fraction, multiply by its reciprocal: $\$3 \times (\frac{2}{1})$

Step 3 — Calculate: $\$3 \times 2 = \$6$

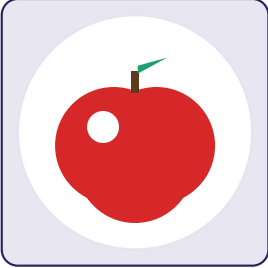
Step 4 — Write the unit rate with units: \$6 per pound

Tier 1 • Whole-Number Unit Rates • Cards 01–02

Cut along the dashed lines. Fold the answer tab up to hide the answer, then unfold to self-check after solving.

CARD 01

TIER 1 • 6.RP.A.2



Apples

\$4.00

for 2 lbs

[editable price tag]

WHOLE-NUMBER UNIT RATES

TASK:
Find the unit rate. Show your work as a ratio and then as a unit rate.

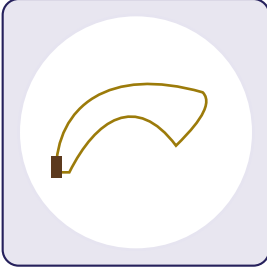
SHOW YOUR WORK

* FOLD UP ON DOTTED LINE TO SELF-CHECK *

\$2.00 per lb

CARD 02

TIER 1 • 6.RP.A.2



Bananas

\$9.00

for 3 lbs

[editable price tag]

WHOLE-NUMBER UNIT RATES

TASK:
What is the cost per pound of bananas? Express your answer as a unit rate.

SHOW YOUR WORK

* FOLD UP ON DOTTED LINE TO SELF-CHECK *

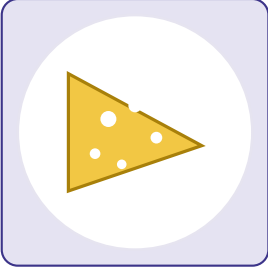
\$3.00 per lb

Tier 2 • Fractional Unit Rates • Cards 09–10

Cut along the dashed lines. Fold the answer tab up to hide the answer, then unfold to self-check after solving.

CARD 09

TIER 2 • 6.RP.A.2



Cheese

\$3.00

for 1/2 lb

[editable price tag]

FRACTIONAL UNIT RATES

TASK:
Find the unit rate (price per 1 whole pound) when 1/2 lb of cheese costs \$3.00.

SHOW YOUR WORK

* FOLD UP ON DOTTED LINE TO SELF-CHECK *

\$6.00 per lb

CARD 10

TIER 2 • 6.RP.A.2



Honey

\$5.00

for 1/4 lb

[editable price tag]

FRACTIONAL UNIT RATES

TASK:
Calculate the unit price per pound of honey when 1/4 lb costs \$5.00.

SHOW YOUR WORK

* FOLD UP ON DOTTED LINE TO SELF-CHECK *

\$20.00 per lb

Tier 3 • Constant Speed Problems • Cards 17–18

Cut along the dashed lines. Fold the answer tab up to hide the answer, then unfold to self-check after solving.

CARD 17

TIER 3 • 6.RP.A.3b



Family Road Trip

180 mi
for 4 hours
[editable price tag]

CONSTANT SPEED PROBLEMS

TASK:
A family drove 180 miles in 4 hours. What was their average speed in miles per hour (mph)?

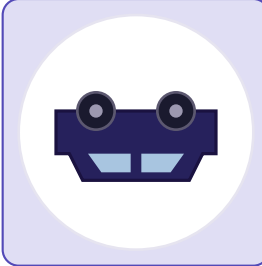
SHOW YOUR WORK

* FOLD UP ON DOTTED LINE TO SELF-CHECK *

45 mph

CARD 18

TIER 3 • 6.RP.A.3b



Cross-Country Drive

240 mi
for 3 hours
[editable price tag]

CONSTANT SPEED PROBLEMS

TASK:
A truck traveled 240 miles in 3 hours. Find the average speed in mph.

SHOW YOUR WORK

* FOLD UP ON DOTTED LINE TO SELF-CHECK *

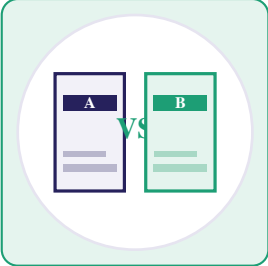
80 mph

Tier 4 • Multi-Step Better Buy • Cards 25–26

Cut along the dashed lines. Fold the answer tab up to hide the answer, then unfold to self-check after solving.

CARD 25

TIER 4 • 6.RP.A.3b



MULTI-STEP BETTER BUY

TASK:
Compare the two cereal boxes.
Which is the better buy? Show
both unit prices.

Cereal

A: \$4.50
B: \$5.76
(18 oz | 24 oz)

[editable price tag]

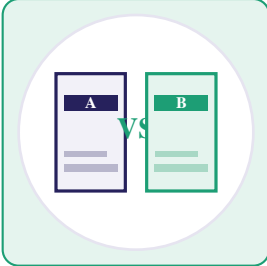
SHOW YOUR WORK

* FOLD UP ON DOTTED LINE TO SELF-CHECK *

Box B (24 oz) at \$0.24/oz is the better buy

CARD 26

TIER 4 • 6.RP.A.3b



MULTI-STEP BETTER BUY

TASK:
Compare the two juice bottles.
Which is the better buy? Show
both unit prices.

Apple Juice

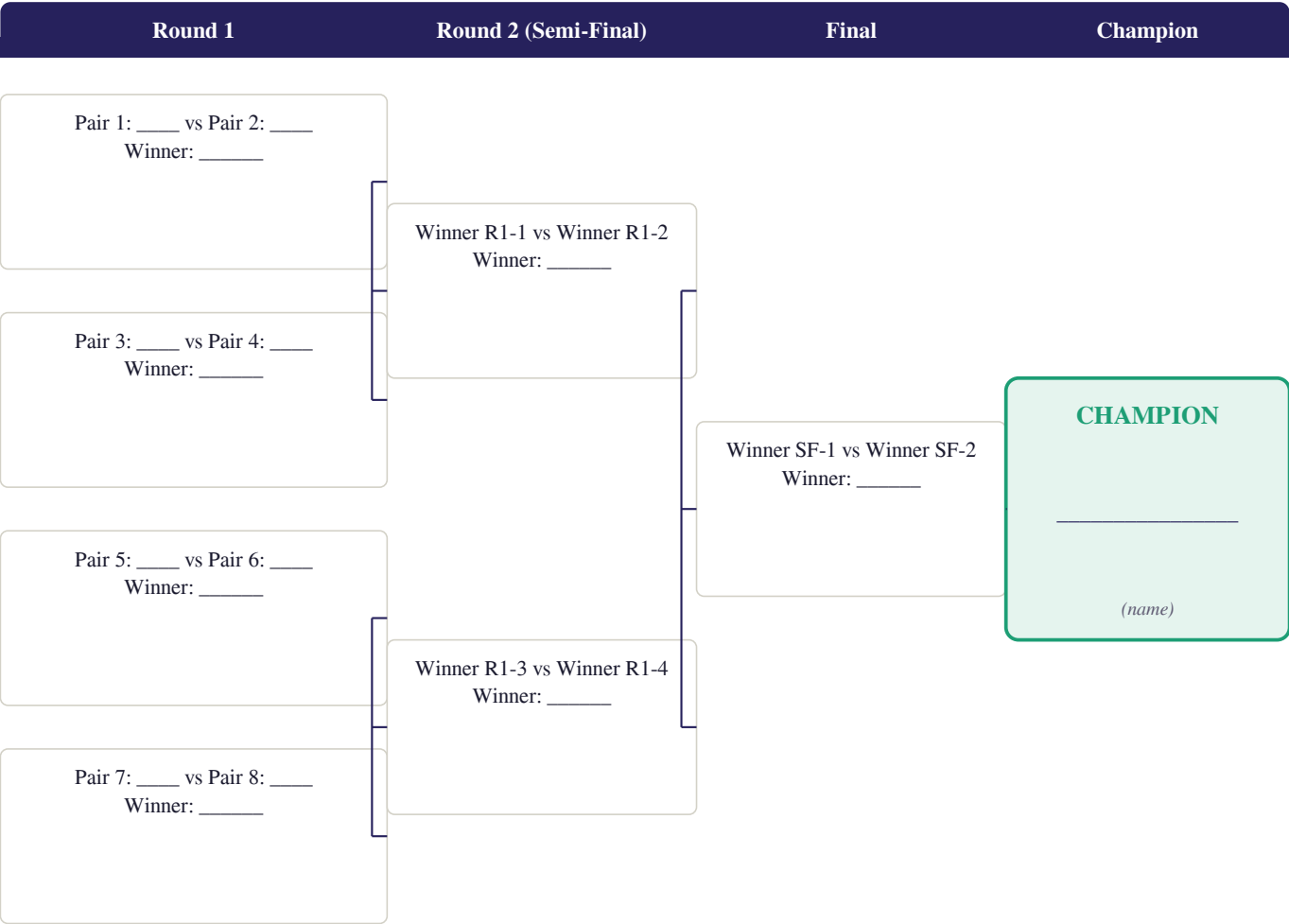
A: \$4.00
B: \$5.50
(64 oz | 96 oz)

[editable price tag]

SHOW YOUR WORK

* FOLD UP ON DOTTED LINE TO SELF-CHECK *

Bottle B (96 oz) at ≈\$0.057/oz is the better buy



16-Team Bracket (Small Groups of 4)

For larger classes, use the 16-team bracket with small groups of 4 students. Within each group of 4, two pairs compete in Round 1, and the winners face off in Round 2. The 8 group champions then advance to the championship rounds. This format works well for classes of 24-32 students.

Group	Player 1 vs Player 2	Player 3 vs Player 4	Group Champion
Group 1	P1: ____ vs P2: ____ → Winner: ____	P3: ____ vs P4: ____ → Winner: ____	Champion: ____
Group 2	P1: ____ vs P2: ____ → Winner: ____	P3: ____ vs P4: ____ → Winner: ____	Champion: ____
Group 3	P1: ____ vs P2: ____ → Winner: ____	P3: ____ vs P4: ____ → Winner: ____	Champion: ____
Group 4	P1: ____ vs P2: ____ → Winner: ____	P3: ____ vs P4: ____ → Winner: ____	Champion: ____

CCSS Alignment Chart — Every Card Mapped to Standards

The Common Core State Standards for Mathematics (CCSS-M) specify what students should know and be able to do at each grade level. This resource targets two standards within the Grade 6 Ratios and Proportional Relationships (6.RP) domain. The chart below maps every task card and exit ticket to one of these two standards, with a brief description of the specific skill the card assesses and the Webb's Depth of Knowledge (DOK) level. Use this chart to support your lesson planning, to communicate standards alignment to administrators, and to identify which cards to assign for targeted skill practice.

Targeted Standards

Standard	Description	Where Addressed
6.RP.A.2	Understand the concept of a unit rate a/b associated with a ratio $a:b$ with $b \neq 0$, and use rate language in the context of a ratio relationship. For example, "This recipe has a ratio of 3 cups of flour to 4 cups of sugar, so there is $\frac{3}{4}$ cup of flour for each cup of sugar." "We paid \$75 for 15 hamburgers, which is a rate of \$5 per hamburger."	Tier 1 (Cards 1-8) • Tier 2 (Cards 9-16) • Exit Tickets A and B (Question 1)
6.RP.A.3b	Solve unit rate problems including those involving unit pricing and constant speed. For example, if it took 7 hours to mow 4 lawns, then at that rate, how many lawns could be mowed in 35 hours? At what rate were lawns being mowed?	Tier 3 (Cards 17-24) • Tier 4 (Cards 25-32) • Exit Tickets B and C (Question 2)

Per-Card Mapping

Card	Tier	Standard	Skill Assessed	DOK
01	T1	6.RP.A.2	Compute price per pound with whole numbers	DOK 1
02	T1	6.RP.A.2	Compute price per pound with whole numbers	DOK 1
03	T1	6.RP.A.2	Compute price per box with whole numbers	DOK 1
04	T1	6.RP.A.2	Compute price per pound with whole numbers	DOK 1
05	T1	6.RP.A.2	Compute price per jar with whole numbers	DOK 1
06	T1	6.RP.A.2	Compute price per gallon with whole numbers	DOK 1
07	T1	6.RP.A.2	Compute price per loaf with whole numbers	DOK 1
08	T1	6.RP.A.2	Compute price per bag with whole numbers	DOK 1
09	T2	6.RP.A.2	Compute price per pound when quantity is $\frac{1}{2}$	DOK 2
10	T2	6.RP.A.2	Compute price per pound when quantity is $\frac{1}{4}$	DOK 2
11	T2	6.RP.A.2	Compute price per pound when quantity is $\frac{1}{3}$	DOK 2
12	T2	6.RP.A.2	Compute price per pound when quantity is $\frac{1}{2}$	DOK 2
13	T2	6.RP.A.2	Compute price per pound when quantity is $\frac{3}{4}$	DOK 2
14	T2	6.RP.A.2	Compute price per pound when quantity is $\frac{2}{3}$	DOK 2
15	T2	6.RP.A.2	Compute price per pound when quantity is $\frac{1}{4}$	DOK 2

Master Answer Key — All 32 Cards

This Master Answer Key consolidates the worked solutions for all 32 task cards in one place. Each card has its full step-by-step solution, including the rate as a fraction, the division step, the unit rate with units, and an interpretation of the result. Use this section as a quick reference during instruction, or print it as a packet for substitute teachers, parent volunteers, or peer tutors who may not have taught unit rate before.

The solutions are organized by tier, mirroring the order of the task cards. For Tier 4 cards (Better Buy comparisons), the solution shows both unit prices and the conclusion about which option is the better buy. If a card's solution seems to differ from what your students computed, check whether they divided in the correct order and whether they remembered to include units in the final answer.

Quick Answer Grid

Card	Tier	Product	Final Answer
01	T1	Apples	\$2.00 per lb
02	T1	Bananas	\$3.00 per lb
03	T1	Crackers	\$3.00 per box
04	T1	Potatoes	\$2.00 per lb
05	T1	Pasta Sauce	\$5.00 per jar
06	T1	Milk	\$2.00 per gallon
07	T1	Bread	\$3.00 per loaf
08	T1	Oranges	\$5.00 per bag
09	T2	Cheese	\$6.00 per lb
10	T2	Honey	\$20.00 per lb
11	T2	Salmon	\$12.00 per lb
12	T2	Almonds	\$10.00 per lb
13	T2	Coffee	\$8.00 per lb
14	T2	Pistachios	\$6.00 per lb
15	T2	Spices	\$12.00 per lb
16	T2	Chocolate	\$16.00 per lb
17	T3	Family Road Trip	45 mph
18	T3	Cross-Country Drive	80 mph
19	T3	City Commute	60 mph
20	T3	Train Journey	64 km/h
21	T3	Bike Ride	60 mph
22	T3	Long-Distance Flight	75 mph
23	T3	City Bus	48 km/h

FULL RESOURCE OVERVIEW

WHAT'S INSIDE

The complete **Unit Rate Real-World Grocery Challenge** — a premium, classroom-tested Grade 6 math resource.

83

PAGES

32

TASK CARDS

4

TIERS

3

EXIT TICKETS

5

EXTENSIONS

100%

READY

EVERYTHING YOU GET

1

Tier 1—Whole-Number Unit Rates

8 CARDS • 6.RP.A.2

Apples, milk, bread — clean whole-number unit prices.

2

Tier 2—Fractional Unit Rates

8 CARDS • 6.RP.A.2

Half-pounds, quarter-gallons — fractional quantities.

3

Tier 3—Constant Speed Problems

8 CARDS • 6.RP.A.3B

Miles per hour, feet per second — real motion contexts.

4

Tier 4—Multi-Step Better Buy

8 CARDS • 6.RP.A.3B

Two options, two unit prices, one better buy.

★

Battle Bracket Tournament

8-TEAM PAIR GAME

Gamified head-to-head practice + champion certificate.

✍

Differentiated Recording Sheets

4 TIERS + MASTER

Structured workspace for every student every day.

✓

Exit Tickets A / B / C

SCAFFOLD • STANDARD • CHALLENGE

Quick formative checks at three readiness levels.

≡

CCSS Alignment Chart

ALL 32 CARDS MAPPED

Every card tied to 6.RP.A.2 or 6.RP.A.3b with DOK level.

A

Master Answer Key

32 WORKED SOLUTIONS

Step-by-step reasoning for every card with teaching notes.

5-DAY PACING PLAN INCLUDED

1

Launch & Hook

Concept background + grocery flyer

2

Tiered Practice

Cards 1–16, recording sheets

3

Battle Bracket

Partner tournament, cards 17–32

4

Exit Ticket

Formative assessment A/B/C

★ AVAILABLE NOW ON TPT ★