



Handout 06.13: Scaling Worksheet and Costing Sheet

Name: _____ Date: _____ Station: _____ Option: _____

All prices are real Long Island supermarket prices marked ****.

Page 1. The three-step rule and your base recipe

The three-step rule

1. **Divide** the number of portions you need by the number the recipe makes. That is your **scale factor**.
2. **Multiply** every ingredient by the scale factor.
3. **Round up** to the number of packages the store actually sells. Always up, never down.

The worked example (do this one with the teacher):

A recipe makes 4 servings and needs 8 ounces of dry spaghetti. We need 28 portions.

- Step 1: $28 \div 4 = 7$. The scale factor is 7.
- Step 2: $8 \text{ oz} \times 7 = \mathbf{56 \text{ oz}}$.
- Step 3: $56 \text{ oz} \div 16 \text{ oz per pound} = 3.5 \text{ lb}$. The store sells 1 lb boxes. 3.5 rounds up to **4 boxes**.

Why always up: running out at minute 30 is the one mistake you cannot fix. Buying one extra box costs \$1.29. Not feeding six people costs the whole project.

The base recipes (all make 4 servings). Find yours.

Option A: Spaghetti with Marinara and Parmesan (4 servings)

- 8 oz dry spaghetti
- 1 1/2 cups marinara sauce
- 1/4 cup shredded parmesan
- Water to fill the pot 3/4 full

Option B: Pizza Tortillas (4 servings)

- 4 flour tortillas, fajita size
- 1/2 cup pizza sauce
- 3/4 cup shredded mozzarella
- 20 pepperoni slices (5 each)

Option C: Bean and Cheese Burritos (4 servings)

- 4 flour tortillas, fajita size
- 3/4 cup refried beans
- 1/2 cup shredded Mexican cheese blend
- 1/4 cup salsa

Option D: Garlic Bread and Vegetable Tray (4 servings)

- 4 pieces of garlic bread (one 14 oz loaf makes about 12 pieces)
- 2 tablespoons softened butter
- 1/2 teaspoon garlic powder



- 1/4 lb baby carrots, washed and peeled

Option E: No-Bake Cookie Dessert Cups (4 servings)

- 8 chocolate sandwich cookies (2 each)
- 3/4 cup whipped topping
- 4 plastic cups, 9 oz

Your scale factor

Portions we need: **28** ÷ Recipe makes: _____ = Scale factor: _____

Page 2. The scaling table and the conversion strip

The scaling table (Day 1, Step 2)

Every ingredient gets a row. The Scale Lead reads each row aloud before it is written.

Ingredient	Amount for 4	× scale factor	Scaled amount	Unit the store sells in	Packages to buy (round UP)
		× _____			
		× _____			
		× _____			
		× _____			
		× _____			
		× _____			
		× _____			

The conversion strip (Day 1, Step 3). Fill this in with the teacher and the real packages.

What you need to know	The number
1 cup = _____ fluid ounces	8
1 pound = _____ ounces by weight	16
1 stick of butter = _____ tablespoons = _____ cup	8 tbsp = 1/2 cup
1 tablespoon = _____ teaspoons	3
Shredded cheese: _____ ounces by weight is about 1 cup, so an 8 oz bag is about _____ cups	4 oz = 1 cup, so 8 oz ≈ 2 cups
A 16 oz can of refried beans holds about _____ cups	1 3/4
A 14.3 oz pack of sandwich cookies holds about _____ cookies	36
A 14 oz loaf of Italian bread makes about _____ serving pieces	12
One aerosol can of whipped topping gives about _____ cups	2
An 8 oz pack of sliced pepperoni holds	150



about ____ slices	
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The two practice conversions

1. A recipe wants **3 cups** of broth. The store sells a **32 fluid ounce** box. Is one box enough? Show the math.

$3 \text{ cups} \times 8 \text{ fl oz} = \underline{\hspace{2cm}} \text{ fl oz}$. The box holds $\underline{\hspace{2cm}} \text{ fl oz}$. Enough? $\underline{\hspace{2cm}}$ Left over: $\underline{\hspace{2cm}}$ cups.

2. A recipe wants **2 1/2 cups** of shredded cheese. The store sells **8 ounce** bags. How many bags?

$2 \frac{1}{2} \text{ cups} \times 4 \text{ oz per cup} = \underline{\hspace{2cm}} \text{ oz}$. $\underline{\hspace{2cm}} \text{ oz} \div 8 \text{ oz per bag} = \underline{\hspace{2cm}} \text{ bags}$. Round up: $\underline{\hspace{2cm}}$ bags.

The trap

Circle the right answer: **8 ounces on a bag of shredded cheese is** (a weight / a volume).

Write the sentence: "Eight ounces of shredded cheese is about $\underline{\hspace{2cm}}$ cups, not one cup, because $\underline{\hspace{4cm}}$."

The yield check (Day 1, Step 4)

We need **30** portions: 28 students, the teacher, and one spare.

Our plan makes: $\underline{\hspace{2cm}}$ portions. Show how you know: $\underline{\hspace{4cm}}$

Circle one: **CLEAR** **30** / **ADD** $\underline{\hspace{2cm}}$ **more of** $\underline{\hspace{2cm}}$

If we have spare portions, they will go to: $\underline{\hspace{4cm}}$

Page 3. The pre-filled scaling table (grade 6 support, or anyone who needs it)

The scale factor is already entered. Your job is columns 4, 5, and 6.

Option A: Spaghetti with Marinara

Ingredient	Amount for 4	$\times 7$	Scaled amount	Store sells	Packages to buy
Dry spaghetti	8 oz	$\times 7$	_____ oz = _____ lb	1 lb box	_____
Marinara sauce	1 1/2 cups	$\times 7$	_____ cups = _____ fl oz	24 oz jar	_____
Shredded parmesan	1/4 cup	$\times 7$	_____ cups	6 oz bag (≈ 2 cups)	_____

Option B: Pizza Tortillas

Ingredient	Amount for 4	$\times 7$	Scaled amount	Store sells	Packages to buy
Flour tortillas	4	$\times 7$	_____	20 count pack	_____
Pizza sauce	1/2 cup	$\times 7$	_____ cups = _____ fl oz	14 oz jar	_____
Shredded mozzarella	3/4 cup	$\times 7$	_____ cups	8 oz bag (≈ 2 cups)	_____
Pepperoni slices	20	$\times 7$	_____ slices	8 oz pack (≈ 150)	_____

Option C: Bean and Cheese Burritos

Ingredient	Amount for 4	$\times 7$	Scaled amount	Store sells	Packages to buy
Flour tortillas	4	$\times 7$	_____	20 count pack	_____
Refried beans	3/4 cup	$\times 7$	_____ cups	16 oz can ($\approx 1 \frac{3}{4}$ cups)	_____
Shredded cheese blend	1/2 cup	$\times 7$	_____ cups	8 oz bag (≈ 2 cups)	_____
Salsa	1/4 cup	$\times 7$	_____ cups = _____ fl oz	15.5 oz jar	_____

Option D: Garlic Bread and Vegetable Tray

Ingredient	Amount for 4	$\times 7$	Scaled amount	Store sells	Packages to buy
Garlic bread pieces	4	$\times 7$	_____ pieces	14 oz loaf ($\approx$ 12 pieces)	_____
Softened butter	2 tbsp	$\times 7$	_____ tbsp = _____ sticks	1 lb, 4 sticks	_____
Garlic powder	1/2 tsp	$\times 7$	_____ tsp	3.12 oz jar	_____
Baby carrots	1/4 lb	$\times 7$	_____ lb	1 lb bag	_____

Option E: No-Bake Cookie Dessert Cups

Ingredient	Amount for 4	$\times 7$	Scaled amount	Store sells	Packages to buy
Sandwich cookies	8	$\times 7$	_____ cookies	14.3 oz pack (≈ 36)	_____
Whipped topping	3/4 cup	$\times 7$	_____ cups	aerosol can (≈ 2 cups)	_____
Plastic cups	4	$\times 7$	_____ cups	50 count pack	_____

Page 4. The Costing Sheet (Day 2)

Station budget: **\$20.00**. Write the running total after **every** line, not at the end.

#	Item	Brand	Size	Price	Price per ounce (or per count)	Packages	Line cost	Running total
1				\$	\$		\$	\$
2				\$	\$		\$	\$
3				\$	\$		\$	\$
4				\$	\$		\$	\$
5				\$	\$		\$	\$
6				\$	\$		\$	\$
7				\$	\$		\$	\$
8	Room pantry (foil, spray, salt, spoons, plates)	room		\$0.00			\$0.00	\$

Station total: \$_____ Under the \$20.00 budget by: \$_____ OVER by: \$_____

Cost per person (total ÷ 28): \$_____

The two questions to ask on every line

1. What does the **whole package** cost? That is what you pay.
2. What does **one ounce** cost? That is how you choose.

Worked example: store-brand shredded mozzarella, 8 oz, \$1.99. $\$1.99 \div 8 = \mathbf{\$0.249 \text{ per ounce}}$. Name brand, 8 oz, \$2.99. $\$2.99 \div 8 = \mathbf{\$0.374 \text{ per ounce}}$. The store brand is cheaper by 12.5 cents an ounce.

The Unit 1 rule, still true: you pay for the whole package, not the spoonful you use.

Page 5. Circular excerpt (Day 2). Use this if a full circular is too much, or if the store's circular is missing an item.

Prices verified week of March 20 to 26, 2026.

Item	Brand	Size	Price
Spaghetti	store brand	1 lb	\$1.29
Spaghetti	name brand	1 lb	\$2.19
Penne or ziti	store brand	1 lb	\$1.29
Marinara sauce	store brand	24 oz	\$2.79
Marinara sauce	name brand	24 oz	\$3.99
Marinara sauce	store brand	45 oz	\$4.99
Pizza sauce	store brand	14 oz	\$1.69
Alfredo sauce	store brand	16 oz	\$3.49
Shredded mozzarella	store brand	8 oz	\$1.99
Shredded mozzarella	name brand	12 oz	\$3.49
Shredded Mexican cheese blend	store brand	8 oz	\$1.99
Shredded parmesan	store brand	6 oz	\$1.99
Ricotta cheese	name brand	32 oz	\$4.99
Cheese sticks	store brand	12 count	\$3.99
Flour tortillas, fajita size	name brand	20 count	\$3.49
Flour tortillas, burrito size	name brand	16 count	\$6.59
Italian bread	store bakery	14 oz loaf	\$2.99
Salted butter	store brand	1 lb, 4 sticks	\$3.99
Salted butter	name brand	1 lb, 4 sticks	\$5.99
Garlic powder	store brand	3.12 oz	\$1.99
Refried beans	name brand	16 oz can	\$1.99
Black beans	store brand	15 oz can	\$1.19
Instant rice	store brand	28 oz	\$4.79
Salsa	store brand	15.5 oz	\$2.49
Sour cream	name brand	16 oz	\$2.49
Pepperoni, pre-sliced	name brand	8 oz	\$4.99



Bite-size cooked meatballs, frozen	name brand	40 oz, 80 count	\$14.99
Half rotisserie chicken, cooked	deli	each	\$3.99
Deli-sliced turkey or ham	deli	1 lb	\$5.99
Baby carrots, washed and peeled	store brand	1 lb bag	\$1.99
Grape tomatoes		1 pint	\$2.99
Shredded lettuce, bagged	store brand	8 oz	\$2.49
Pre-diced tomatoes, refrigerated		8 oz cup	\$2.49
Chocolate sandwich cookies	store brand	14.3 oz	\$2.99
Chocolate sandwich cookies	name brand	19.1 oz	\$6.59
Whipped topping, aerosol	store brand	can	\$2.99
Whipped topping, aerosol	name brand	can	\$4.49
Brownie mix	name brand	18.4 oz	\$2.99
Rolled oats	store brand	42 oz	\$4.29
Raisins	store brand	15 oz	\$3.49
Tortilla chips	store brand	13 oz	\$2.99
Crackers	store brand	box	\$2.99
Shelf-stable milk	store brand	1 quart	\$2.99
Large eggs	store brand	dozen	\$3.49
Plastic cups, 9 oz	store brand	50 count	\$3.99
Plastic cups with lids	store brand	28 count	\$3.99
Gallon zip-lock bags	store brand	box	\$3.99
Aluminum foil	store brand	roll	\$3.99

Page 6. The Swap Log and the Peer Check

The swap log (Day 2, Step 3)

Three legal swaps: **store brand for name brand; a bigger package when the price per ounce drops and you will use it; cut a line that is not on the plate.**

A swap only counts if it saves at least **\$0.25** and does not break the allergy list or your station card.

#	What we swapped out	What we swapped in	Old unit price	New unit price	Saved	What we gave up
1			\$	\$	\$	
2			\$	\$	\$	
3			\$	\$	\$	

Total saved: \$_____ New station total: \$_____

Allergy recheck after the swaps. Did any swap bring in a new allergen? Circle: YES / NO If YES, what and what we will do: _____

Sentence frames for the swap log

English	Turkish	Portuguese	Spanish
We will buy ____ instead of ____ and save \$____.	____ yerine ____ alacağız ve ____ dolar tasarruf edeceğiz.	Vamos comprar ____ em vez de ____ e economizar \$____.	Vamos a comprar ____ en lugar de ____ y ahorrar \$____.
The store brand costs ____ per ounce. The name brand costs ____ per ounce.	Market markası onsuz . Ünlü marka onsuz .	A marca do mercado custa ____ por onça. A marca famosa custa ____ por onça.	La marca del supermercado cuesta ____ por onza. La marca conocida cuesta ____ por onza.
We gave up ____ to stay under budget.	Bütçeyi aşmamak için ____ vazgeçtik.	Abrimos mão de ____ para ficar no orçamento.	Renunciamos a ____ para no pasarnos del presupuesto.



The peer check (Day 2, Step 4). Trade sheets with the station next door.

We are checking Station ____'s sheet. Checked by: _____

Check	Initial
Every line has a size and a unit	
The running total adds up (we redid it)	
The total is at or under \$20.00	
The yield check clears 30	
Nothing on the list is on the class allergy list, or the substitution is written	

One thing we would fix: _____

Teacher signature (required before Lesson 6.15): _____ **Date:** _____