

# Unit Rate Project

{Differentiated Math Project}

PDF & Digital Editions



**2 Peas and a Dog**  
MIDDLE SCHOOL TEACHING RESOURCES

# RESOURCE INCLUDES

- Google Slides, Google Forms and PDF versions
- Teacher Instructions
- 3 Different Levels of Assignment Sheets
- Assessment Rubric
- Points-Based Grade
- Answer Key

## Example Pages

### UNIT RATE INFORMATION



#### Unit Rates

A unit rate is a common method of comparing costs of similar items (e.g. bags of sugar, boxes of laundry soap). People usually prefer to find the cheaper unit rate. The bigger item is usually the cheaper unit, but not always. Do your math to find out!

#### Unit Rate Formula

To find out the unit rate of an item you must divide the cost of the product by its mass or quantity. For example, 12 eggs cost \$2.99. To find the unit rate, you divide 2.99 (cost) by 12 (quantity). The unit rate of a dozen eggs is \$0.25/egg.

Formula {Cost / Mass or Quantity}

#### Things to Know

- ★ You cannot purchase a fraction of a product. You must purchase the full product with the goal of having the least amount left over.
- ★ It might be cheaper to buy more of a product if you are making a large quantity of fudge.
- ★ Common unit rates are 100g and 100ml any smaller would be too hard to work with.
- ★ 1000g = 1kg & 1000ml = 1L

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### FOOD PLUS MART



Task: Calculate the cost to create 1 tray of fudge.

Quantity of Ingredients (1 Tray)	Store Package Size & Cost Per Package	Number of Packages Required From This Store	Total Cost of Ingredient
158ml Evaporated Milk	\$1.50 / 200ml can		
170g Butter	\$5.00 / 400g stick		
600g Sugar	\$1.99 / 500g bag		
350g Chocolate Chips	\$3.49 / 350g bag		
200g Mini Marshmallows	\$2.29 / 400g bag		
Total Cost:			

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### Unit Rate

#### Summative Task Assessment

Level 1	Level 2	Level 3	Level 4
<input type="checkbox"/> Student has several misconceptions in their work. <input type="checkbox"/> Meet with teacher to discuss and review your answers.	<input type="checkbox"/> Student expresses partial understandings and information about the topic. <input type="checkbox"/> Information is conveyed in an unclear manner. <input type="checkbox"/> Answer is missing key words and examples.	<input type="checkbox"/> Student expresses clear understandings and information about the topic. <input type="checkbox"/> Information is conveyed in a clear manner. <input type="checkbox"/> Examples need more detail.	<input type="checkbox"/> Student demonstrates thorough understandings and information about the topic. <input type="checkbox"/> Information is conveyed in a very clear manner. <input type="checkbox"/> Accurate examples are used.

#### Next Steps:

- Practise the formula for unit rate.
- Practise adding, subtracting, multiplying with decimals.
- Practise converting metric units.
- Add more detail and depth to math journal reflections.

#### Feedback:

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# CALCULATE THE UNIT RATE

Your Task: The Sweetness Bakery has a fudge issue. They must calculate the cost of the ingredients for their fudge from each supplier. Your answers should be accurate to two decimal places.

Ingredient	Store Name	Price & Quantity	Unit Rate
Chocolate Chips	Super Saver Store	\$9.99 / 1kg bag	
Chocolate Chips	Food Plus Mart	\$3.49 / 1kg bag	
Mini Marshmallows	Super Saver Store	\$4.99 / 1kg bag	
Mini Marshmallows	Food Plus Mart	\$2.99 / 400g bag	
Evaporated Milk	Super Saver Store	\$2.19 / 370ml can	
Evaporated Milk	Food Plus Mart	\$1.50 / 200ml can	
Butter	Super Saver Store	\$5.79 / 454g stick	
Butter	Food Plus Mart	\$5.00 / 400g stick	
Sugar	Super Saver Store	\$2.99 / 2 kg bag	
Sugar	Food Plus Mart	\$1.99 / 500g bag	