

Common Cents

Dawn Shattuck – NICC

Grade Level (Req.): 7th-10th grade	Content Area (Req.): Geography	Unit (Opt.):
<p>Connections to Other Disciplines (Opt.):</p> <ul style="list-style-type: none"> • Mathematics: communication, connections, data analysis, reasoning and proofs • • 		
Time Frame (Req.): 1 class period	Goal (Req.): Students will learn about life in Chile.	
	<p>Objective (Req.): Students will be able to convert currency from USD (United States Dollars) to CLP (Chilean Pesos) and vice versa. Students will familiarize themselves with common prices in Chile and make comparisons of the costs of similar items in the United States. Students will analyze the differences in purchasing power and minimum wage in United States and Chile.</p>	
<p>Materials Needed (Req.):</p> <ul style="list-style-type: none"> • Computer with Internet access to currency exchange rates • Photos with prices – needs to be created (originals not available) • Common Cents worksheet, one for each student • Cost of Living Analysis worksheet, one for each student • • • 	<p>New Vocabulary (Opt.):</p> <ul style="list-style-type: none"> • • • • • 	
<p>Anticipatory Set/Introduction [Inquiry Question is required] (Req.): What does it cost to live in Chile?</p>		
<p>Instructional Sequence/Procedure (Req.):</p> <ol style="list-style-type: none"> 1. Instructor displays a few items bought in Chile announcing the price paid for them in Chilean pesos. Students are welcome to handle the items. 2. Instructor asks, “So, what did these items cost me in U.S. dollars?” Discussion follows. 3. Instructor introduces lesson, posing the challenge that students discover the cost of each item by learning how to use the exchange rate to convert currencies. 4. Instructor leads interactive classroom discussion of currency conversion between USD and Chilean pesos. Ask students to look up the current exchange rate on the Internet. Can students define an easy way to estimate the conversion rate? 5. Instructor offers each student (or group of two students) a digital file folder with photos of Chilean items with their prices listed in CLP. 6. Students will identify the items and convert the prices to USD on the Common Cents worksheet. 7. Discuss the U.S. dollar purchasing power in Chile. Are common items cheaper in the U.S. or in Chile? 8. Instructor distributes Cost of Living Analysis worksheet. 9. Enrichment: Conversion Fees – Tell students to find out how much they would have to pay to 		

convert their U.S. dollars to another currency. What do banks charge for the service they provide? What do currency-exchange companies charge? Why do they charge these fees? Currency Debate – Should all countries use the same currency? Ask students to list reasons in favor of and reasons against one universal currency. The Peruvian Soles (or other foreign currency) – Extend the classroom exercise to include conversion of Chilean pesos or USD to Soles. Research the prices of common items in Peru. How does the purchasing power of the US dollar hold up in Peru?

10. Adaptations: Instructor may consider giving students \$1=\$500 Chilean pesos as a constant exchange rate when working the assigned exercises using the digital photographs. Instructor may consider allowing students to use an online currency converter.

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Formative Evaluation (Req.): Class discussion and understanding.

Assessment (Req.): Students will be assessed on writing five of their own currency conversion problems, converting the cost of common US items in USD to CLP and providing solutions. Students will be assessed on Cost of Living Analysis between values in U.S. and values in Chile.

Iowa Core Curriculum Standards Used (Req.):

- Mathematics, grade 9-12: Solve problems that arise in mathematics and in other contexts.
- Mathematics, grade 9-12: Recognize and apply mathematics in contexts outside of mathematics.
- Mathematics, grade 9-12: Understand and apply ration and rate, including percents, and connect ratio and rate to fractions and decimals.
- Geography, grade 9-12: Understand how physical and human characteristics create and define regions.
- Technology Literacy (21st Century Skills), grade 9-12: Apply digital tools to gather, evaluate, and use information.
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Common Core Curriculum Standards Used (Opt.):

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NGS Standards Used (Req.):

- The physical and human characteristics of places
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<ul style="list-style-type: none"> • • • • • • • 	
<p>Five Themes of Geography Used (Req.):</p> <ul style="list-style-type: none"> • Place • Region • • • 	<p>School District Standards and Benchmarks (Opt.):</p> <ul style="list-style-type: none"> • • •
<p>21st Century Universal Constructs (Opt.):</p>	
<p>Other Disciplinary Standards (Opt.):</p> <ul style="list-style-type: none"> • • • • • 	
<p>Other Essential Information (Opt.):</p>	
<p>Other Resources (Opt.):</p> <ul style="list-style-type: none"> • http://finance.yahoo.com/currency • http://www.reuters.com/article/rbssUtilitiesElectric/idUSN1360878020090313 • http://online.wsj.com/mdc/public/page/2_3020-worlddollar.html; http://online.wsj.com/article/BT-CO-20090617-715372.html • http://www.teachingchile.com/pdf/cost.pdf 	

Common Cents

1. What is the two current rate of exchange between U.S. dollars (USD) and Chilean pesos (CLP)? Name the source of your exchange rate.

\$1.00 USD = _____ CLP

Source of exchange rate:

CONVERTING CHILEAN PESOS TO U. S. DOLLARS

List at least 12 items from the Chile photographs. List the prices of the items in CLP. Convert the prices to USD.

1.

2.

3.

4.

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3. Make a list of five common items you purchase with USD each month. List those items and their cost in USD. Then convert costs to CLP.

1.

2.

3.

4.

5.

Cost of Living Analysis

1. In Chile, the current (as of July 2009) minimum wage is \$165,000 CLP per month. What is that in USD?

2. One source reports minimum wage for a teacher as \$335,000 CLP per month. What is that in USD?

3. Using the following chart, estimate monthly expenses in Chile for an unmarried teacher earning minimum teaching wage. Show your work on a separate sheet of paper—write an itemized monthly budget. Be certain that you do not budget more expenses than the amount you are earning.

EXPENSES	AMOUNT IN CLP
Transportation (local: via bus and subway)	1,520
Food (daily estimate)	2,400
HOUSING ALTERNATIVES	
Bed and Breakfast Style Setting—Multi-Room Home (may include breakfast, utilities included, may include TV, free Internet access, always a private room)	
Price ranges from	140,000
to	170,000
Host Family/Live with Chileans (may include breakfast, utilities included, may include TV, free Internet access, always a private room)	
Price ranges from	115,000
	185,000

	to	
Rent a One-Bedroom Furnished Apartment (utilities may be included)		
	Price ranges from	150,000
	to	240,000
Rent a Two-Bedroom Furnished Apartment—Share with Another Teacher (utilities may be included)		
	Price ranges from	220,000
	to	380,000
OTHER EXPENSES		
Bar soap		450
Tube toothpaste		700
Laundry detergent (1 lb/500 g)		900
Milk (1 qt/1 L)		520
Fruit juice (1 qt/1 L)		460
Bottled water		390
Ground coffee (1 lb/500 g)		2,720
Tea bags (pack of 20)		395
Lunch in restaurant		2,190
Coffee in sidewalk café		950
Fast-food hamburger, fries, soda		2,390
International phone call (1 min)		150
Prepaid cell phone		24,000
Internet access (per hour)		600
Men's shampoo and haircut		3,500
Women's shampoo and haircut		6,000
Health club (6-month membership)		95,100

Use a separate sheet of paper to record your itemized monthly budget.

4. What other expenses might you have that are not listed in the chart? Add those to your budget.

5. Analyze your budget. If you lost your teaching job and earned only minimum wage in Chile, what specific changes would you have to make in your budget (you must not spend more than you earn)?

6. Analyze the information you have been given. Use complete sentences and use examples from your exercises to answer these questions. What comparisons can you make between the Chilean and U.S. economy based on this math exercise? What assumptions can you make, and conclusions can you draw? What questions do you have? Do you need/want more information?