

Curriculum topics:

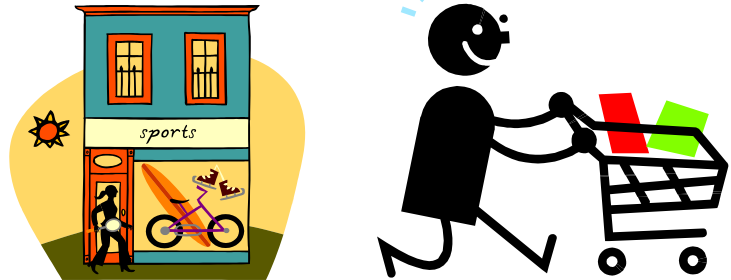
- Financial Literacy
- Bank Accounts
- Real life math
- Percentages
- Reason Quantitatively

Subject:
Mathematics

Grade range: 6 – 9

CHECKBOOK WINDOW SHOPPING

Keeping track of check balances while shopping



Go “shopping” using checks to pay for products and learn how to accurately keep track of checkbook balances.

MY CHECKING ACCOUNT LEDGER

Check number	Date	Description of Transaction	Payment /Debit (-)	Fee	Deposit /Credit (+)	Balance
	2/20/14	Open Account			\$500 00	500 00
1001	2/21/14	Kofe Mart	19 75			-19 75
						480 25
1002	2/21/14	Ball Cap	24 99			-24 99
						455 26
	2/23/14	ATM Cash	100 00	2		-102 00
						353 26
	2/26/14	Deposit			20 00	+20 00
						373 26
	2/28/14	Bday Gift (check 2288)	150 00			+150 00
						523 26
	2/28/14	Monthly Bank Fee		2		-2 00
						521 26
1003	3/2/14	Gift for Mom	35 28			-35 28
						485 98
1004	3/23/14	Pizza Meeza	15 25			-15 25
						470 73

Who we are:

Resource Area for Teaching (RAFT) helps educators transform the learning experience through affordable “hands-on” activities that engage students and inspire the joy and discovery of learning.

For more ideas and to see RAFT Locations

www.raft.net/visit-raft-location

JOHN DOE 123 Main St. Anyplace, CA 95111	1004
	DATE 3-23-14
PAY TO THE ORDER OF <u>Pizza Meeza</u>	\$ <u>15.25</u>
<u>Fifteen and 25/100</u>	DOLLARS
MEMO <u>Pizza for dinner</u>	<u>John Doe</u>
:123456789: 78510051 00*1001	

Materials required

For each group of 2 to 4 students:

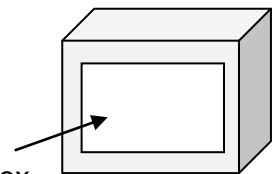
- Box or container with a top that can open and close
- Clear plastic wrap or equivalent
- “Product” cut outs*, 20 or more
- Badge holders, luggage tags, or equal, 3
- Craft sticks, 3
- Binder clips, 3
- Glue or tape
- Chance cards*
- Spinner that can be customized, see RAFT Idea Sheet - **Spinner on a Media Tray**, 1
- Sample blank checks*, 9 per student
- Color paper ~20 cm x 20 cm (~7.5” x 7.5”), 1 per student
- Checking Account Ledger*, 1 per student
- Blank Deposit Slips*, 8 or more
- Pens
- Scratch paper

[*Templates can be downloaded at <http://www.raft.net/raft-idea?isid=735> for product cut outs, chance cards, blank checks, checking account ledgers, and deposit slips as well as instructions for writing checks, deposit slips, and checking account ledgers.]

Preparation before the activity

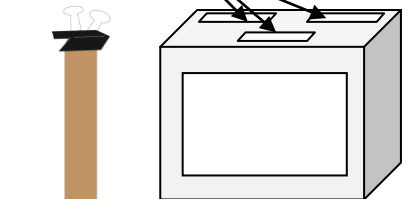
Create Store

- 1 Cut a square hole in one large side of the box as shown. Tape or glue the plastic wrap over the hole to create a the window.



- 2 In the top of the box cut three slots ~8 cm (~3”) by ~3/4 cm (1/2”), wide enough to fit the product cut outs. See illustration to the right.

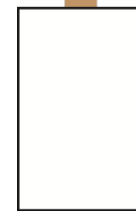
slots for cut-outs



Create Products

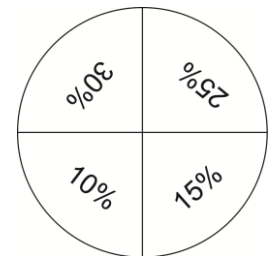
- 3 Cut out the Product images. Optional: have students create products using a blank template. (See <http://www.raft.net/raft-idea?isid=735>)

- 4 Attach a craft stick to the back of each badge holder, use glue or tape if needed. Attach a binder clip to the top of each craft stick, as shown.



Customize Spinner

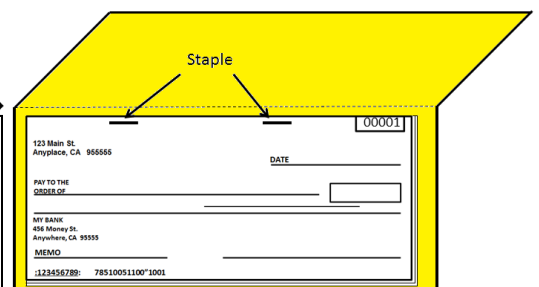
- 5 Draw lines to divide the spinner circle into 4 or more wedge sections; mark each section with a discount percentage (e.g., 10 %, 15%, 25%, 30%).



Create Checkbooks

- 6 For each student, cut out 9 blank checks, stack checks in order, insert into folded paper (checkbook cover); staple together along the inside fold top edge. (See right.)

Fold →



Note: Before the activity review the following with students:

- How to write a check
- How to make a deposit and write a deposit slip
- How to balance a checking account ledger

Find background resources at <http://www.raft.net/raft-idea?isid=735>

To do and notice (for 2 – 4 students)

Note: Before the activity set the sales tax rate to be used (e.g., 10%, 9.5%, 8.75%)



1

Every student gets one checkbook and a copy of the checking account ledger. Each student writes their name on the top left corner of each check and records \$500 as a starting amount in their checking account ledger. Put deposit slips where students can get them as needed.

2

Choose one person to be the clerk (this position will rotate). The clerk chooses a name for the store. The clerk chooses 3 products to display in the box window, inserts each product into a badge holder, and inserts the products into the 3 slots on the top of the box “store”.

3

The clerk spins the spinner to determine the percent discount for the products. All students calculate the sales prices for each product shown and compare results. (Optional: use a different discount for each product.)



Shopping

4

The student to the right of the clerk has the first choice of the products to purchase (one product per person), and then the student to their right chooses, etc.

Note: On a turn if a student does not want to purchase one of the available items, they draw the top card from the chance deck. The student then performs the indicated action, uses a deposit slip if needed, and records the transaction in their check ledger.

Each “purchaser” calculates the sales tax on their chosen product to determine the final price. Next they write a check for that amount (using the store name) and give it to the clerk. After verifying that the check is correct the clerk hands each purchaser their item (after removing it from the badge holder). Each person records the transaction in their check ledger.

5

The person to the right of the clerk becomes the next clerk. The new clerk removes any unsold items, selects 3 new products, puts them in the badge holders, and puts the products in the store. The clerk chooses a new store name and continues following step 3 and 4.

6

The activity continues until each student is the clerk once or twice. At the end of the activity, all players compare and discuss ledgers, purchases, and final balances.

The math behind the activity

Checkbook Window Shopping gives students the opportunity to learn and practice several different elements of real life math:

- How to calculate the total cost of an item based on a percentage discount and sales tax and be able to start with an estimate of this amount. This helps a consumer decide on whether or not to make a purchase.
- How to correctly write a check or deposit - this builds good financial habits.
- The basics of managing a checking account include using mathematics correctly to keep an accurate ledger and to reconcile with a bank’s records every month.
- Keeping up to date on how much money is actually in a checking account prevents getting into trouble with overspending, overdrawn checks, and related charges.
- Doing the math correctly and starting responsible habits early in life helps students to avoid making mistakes that could result in unnecessary fees, expensive charges, and a poor credit rating.

Curriculum Standards:

Percentage as a rate
(Common Core Math Standards: Grade 6, Ratios & Proportions, 3c)

Solve real –life problems using numbers and operations
(Common Core Math Standards: Grade 7, Number System, 3; Equations and Expressions, 3)

Using units and modeling to solve problems
(Common Core Math Standards: High School, Quantities, 1 & 2)

Problem Solving and Reasoning
(Common Core Math Standards: Mathematical Practices Grades 6-9)

Learn more

- Explain in complete sentences how one mentally calculates a discount and sales tax into the final price for an item.
- Add a saving account and regular income (e.g., salary) for each student. Students decide whether to deposit money to either the savings or checking account.
- Add bill invoices (with envelopes). When paying a bill, students fill out all necessary information on the invoice, write the invoice number and relevant information on a check, and then put the bill and check together in one envelope. [Discuss alternate payment methods such as online banking.]
- Have students discuss financial topics, in pairs, small groups, and/or as a class. (Create viable arguments and critique the reasoning of others.) Possible topics include:
 - Saving money vs. spending money; needs vs. wants
 - The importance of paying bills on time (e.g., extra service charges if paid late, risk losing service); payment plans
 - Discuss commonly paid bills (e.g., electricity, gas, phone, cable, water, medical)
 - Money as a limited resource and ways that students can earn more money. What types of jobs are available to most students?
 - Is a discount better than paying regular price? Why might it be important to wait for a sale, and why might it not? Is it always better to buy at a discount?

Related activities: See RAFT Idea Sheets:

Brewing Coffee Mixtures -

[http://www.raft.net/ideas/Brewing Coffee Mixtures.pdf](http://www.raft.net/ideas/Brewing%20Coffee%20Mixtures.pdf)

Happy Trails Mix -

[http://www.raft.net/ideas/Happy Trails Mix.pdf](http://www.raft.net/ideas/Happy%20Trails%20Mix.pdf)

Money You Will Save -

[http://www.raft.net/ideas/Money You Will Save.pdf](http://www.raft.net/ideas/Money%20You%20Will%20Save.pdf)

Price A Piece of Pizza! -

[http://www.raft.net/ideas/Price a Piece of Pizza.pdf](http://www.raft.net/ideas/Price%20a%20Piece%20of%20Pizza.pdf)

Resources

Visit www.raft.net/raft-idea?isid=735 for “how-to” video demos & more ideas!

Grades K-12 Financial Literacy Resources -

<http://www.cde.ca.gov/eo/in/fl/finlitk12.asp>

Financial literacy curriculum from PwC - <http://www.pwc.com/us/en/about-us/corporate-responsibility/commitment-to-youth-education/financial-literacy-curriculum.jhtml>

National Financial Educators Council - Financial Literacy Lesson Plans

<http://www.financialeducatorsCouncil.org/financial-literacy-lesson-plans/>

Acknowledgements:

This idea sheet was developed with generous support from [PwC](http://www.pwc.com).