COUPON CLIPPING

Saving Money with Math by Using Decimals

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Coupon Clipping
Saving Money with Math by Using Decimals

Skill Level
Beginner, 5th Grade

Learner Outcomes
The learner will be able to:
- Use mental math to add coupons
- Identify and calculate monetary decimals
- Describe the savings from a single shopping trip

Educational Standard(s) Supported
Math
5.NBT.B.7

Success Indicator
Learners will be successful if they:
- Explain the value of clipping coupons and calculate total savings for a single shopping trip

Time Needed
30 Minutes

Materials List
- Student Handout – Coupon Clipping
- Sunday Paper – Coupon Section
- Scissors
- Grocery List
- Paper and pencil

Introduction to Content

This lesson gives real-life applications for adding and subtracting decimals and using mental math. In this lesson, students will group, add and subtract monetary decimals.

Introduction to Methodology

This lesson uses modeling and hands-on approaches to aid students' comprehension. The lesson begins with assessing students' prior knowledge of shopping, saving, adding and subtracting decimals.

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Terms and Concepts Introduction
Savings – an amount gained, usually money, by various forms
Discount – amount of money that the original price is reduced
Coupon – a code or barcoded paper that offers a discount or reduction
Mental Math – calculations done without a writing aid or calculator
Decimals – number representing part of a whole number

Setting the Stage and Opening Questions

Ask students about their experiences with shopping by asking where their family or friends grocery shop and how they save money while shopping.

Briefly discuss coupons and discounts before explaining how we observe decimals in money. Point out that decimals simply represent cents or parts of a dollar. If the students have already learned about percents or fractions, this can be addressed briefly as well.

After sharing with the students, ask questions to assess prior knowledge.

- What is a decimal when referring to money?
- What is a coupon?
- What is a discount?

Tell students, **"By the end of this lesson, you will be able to use mental math to add coupons, identify and calculate monetary decimals, and explain the savings from a single shopping trip."**

Experience

This lesson requires a weekly grocery list and clipped coupons. Students can either prepare these as part of the experience, or you can bring them already completed to the class.

Divide students into groups and ask them to sort the coupons into three categories – food, toiletries and cleaning supplies. Once all coupons are sorted, have the students take turns in their group selecting coupons that match the grocery lists.

After all coupons are matched, pass out the Student Handout – Coupon Clipping and demonstrate how to calculate the savings using mental math. Remind students of the importance of place value when dealing with decimals.

For example, if they have five coupons for paper products valued at $1.00, $.50, $.25, $1.50, $1.50, then they can be mentally added this way:

Add dollar amounts first: $1.00 + $1.00 + $1.00 = $3.00
Add change: $.50 + $.50 + $.50 + $.25 = 7 quarters = $1.75
Total: $3.00 + $1.75 = $4 .75

Ask the students to calculate their savings for each category. Then, add the savings in each category to get a total.

Share

Ask the students the following questions:

- Why did we line up decimals when we added?

- What was the purpose of using mental math first?

Process

Tell students that coupons should be used for items that families would normally purchase, and they should take the unit price into account and compare the item with others that do not have coupons.

- What did you notice about the discounts on the coupons?

- Do all the coupons give discounts on the things your family uses?

Generalize

- How much would you save in this trip using the coupons you had in class?

- If you save that much money every time you shopped and you shopped once a week, how much would you save in a month? How much would you save in a year?

- Does coupon clipping make a difference in a single weekly trip? A month? A year?

- How could you help save money in other ways?
  Purchasing generic products, buying in bulk.

Apply

Depending on the comprehension level of the students, show them examples of percentages as discounts. Then, have them discuss how we can determine what percent we saved when compared to the regular cost of items purchased during a shopping trip.

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Life Skill(s)

Participate in 4-H club meetings by saying pledges, completing activities, and being engaged. (Head)

Actively listen to what others are saying; be able to restate or summarize what has been said. (Heart)

Follow instructions. (Heart)

Divide a team task by identifying contributions by each person. (Hands)

Show use of good judgment. (Health)

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Supplemental Information
Educational Standards Met

Math Numbers and Operations

5.NBT.B.7: Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between operations; assess the reasonableness of answers using estimation strategies.

Coupon Clipping

After you match the coupons with the grocery list, calculate the savings using mental math. Remember the importance of place value when using decimals. For example, if you have five coupons for toiletries valued at $1.00, $.50, $.25, $1.50, $1.50, you can mentally add them:

Add dollar amounts first: $1.00 + $1.00 + $1.00 = $3.00
Add change: $.50 + $.50 + $.50 + $.25 = 7 quarters = $1.75
Total: $3.00 + $1.75 = $4 .75

In the space below, calculate your savings for each category:

Food:

Dollar Amounts: _____ = _____
Change: _____ = _____
Total: _____ + _____=_____

Toiletries:

Dollar Amounts: _____ = _____
Change: _____ = _____
Total: _____ + _____=_____

Cleaning Supplies:

Dollar Amounts: _____ = _____
Change: _____ = _____
Total: _____ + _____=_____

Now, add the savings in each category to get the grand total:

Dollar Amounts: _____ = _____
Change: _____ = _____
Grand Total: _____ + _____=_____