The Case of the Shrunken Allowance


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Standards and Benchmarks (see page 10)

Lesson Description
In this lesson, students listen to a story about P.B., who thinks money is missing from the peanut butter jar on his window ledge. In addition to basic concepts of saving and spending, students learn currency equivalency and some measurement concepts.

Grade Level
1-3

Economics Concepts
Bank
Income
Interest
Saving
Spending

Mathematics Concepts
Counting
Counting coins
Coin and currency equivalency

Objectives
Students will
• define bank, income, interest, saving, and spending;
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- give examples of times they have earned income;
- explain that interest helps savers reach goals more quickly;
- explain that saving means giving up spending now and spending now means giving up saving to spend in the future; and
- explain that banks are safe places to save money.

Time

60 minutes

Materials

- Handout 1, one copy for each student and one copy for the teacher to use as a visual
- Handout 2, one copy for each student
- Two 12-ounce jars
- Two 18-ounce jars
- Two 12-ounce bags of small wrapped candy (Place an equal number of candy in one 12-ounce jar and one 18-ounce jar.)
- $10.05 in coins, being sure to include at least two shiny pennies
- Permanent marker
- Some extra coins
- Two $1 dollar bills
- Two old pennies

Procedure

1. Introduce the lesson by displaying one 12-ounce and one 18-ounce jar of candy and asking students which jar they think contains more candy and why. Do not tell them that both jars contain the same amount.

2. Explain that students will listen to a story about a boy who saves his allowance in jars like the candy jars. Discuss the following:
   - What is an allowance? *(An allowance is the money received from a parent or other adult in the family. It can be payment for work that children do at home.)*
   - Do you receive an allowance? *(Answers will vary.)*
   - Where do you keep your allowance? *(Answers will vary.)*
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3. Read the book *The Case of the Shrunken Allowance*. Stop at the end of Chapter 4. Discuss the following:
   - How much allowance did P.B. get each week? *(50 cents)*
   - Do you think P.B. received his allowance for work he did at home? *(Answers will vary.)*

4. Explain that the money people receive for work that they do is called **income**. People can spend income. **Spending** is buying the things you want now. Discuss the following:
   - How does P.B. earn extra income? *(P.B. does extra chores and jobs around the house.)*
   - Has P.B. been spending his income? *(No)*
   - What has P.B. been doing with his income? *(P.B. has kept his income in a jar.)*

5. Explain that **saving** is not spending money now but keeping that money to spend in the future. By not spending his income now, P.B. will have it to buy things sometime in the future. Discuss the following:
   - By saving, what does P.B. give up? *(By saving P.B. gives up the things that he could buy now.)*
   - If P.B. spent his allowance and extra income now, what would he give up? *(If he spent his allowance now, P.B. would be giving up the things that he could buy in the future.)*
   - Why do you think that P.B. is saving? *(Answers will vary but may include for games, toys, books, and so on.)*
   - Are there jobs that you do at home for which you earn income? *(Answers will vary.)*
   - Do you save some of your allowance, income you earn, or money you receive as gifts? *(Answers will vary.)*
   - For what are you saving? *(Answers will vary but may include games, toys, books, and so on.)*
   - Where do you keep your savings? *(Answers will vary but might include in a jar, piggy bank, drawer, or bank.)*

6. Display the empty 12-ounce jar, the $10.05 in coins, and *Handout 1: P.B.’s Allowance*. Distribute a copy of Handout 1 to each student. Explain that the class will complete the worksheet together.

7. Choose a student to come to the front of the room. Ask the class how much allowance P.B. received the first week of June *(50 cents)*. Instruct the student to count coins equaling 50 cents and put them in the 12-ounce jar.
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8. Choose a student to come to the front of the room. Ask the class how much income P.B. earned for doing extra chores the first week of June (25 cents). Instruct the student to count coins equaling 25 cents and add them to the jar.

9. Ask the class how much P.B. had saved by the end of the first week of June (50 cents + 25 cents = 75 cents). Instruct students to write the total on Handout 1 in the box for June, Week 1, just as you do on your displayed copy of Handout 1.

10. Choose a student to come to the front of the room. Ask the class how much allowance P.B. received in the second week of June. (50 cents) Instruct the student to count coins equaling 50 cents and add them to the jar.

11. Choose a student to come to the front of the room. Ask the class how much income P.B. earned for extra chores the second week of June (15 cents). Instruct the student to count coins equaling 15 cents and add them to the jar.

12. Ask the class how much P.B. had saved the second week of June (50 cents + 15 cents = 65 cents). Instruct students to write the total on Handout 1 in the box for June, Week 2, as you model on your displayed copy of Handout 1.

13. Continue this process for Week 3 and Week 4 of June.

14. Instruct students to enter weekly totals into the “Totals” column and add them together for the June total, as you model on your displayed copy of Handout 1 (75 cents + 65 cents + 80 cents + 65 cents = $2.85).

15. Continue this process for July (65 cents + 75 cents + 55 cents + 60 cents + $1.50 = $4.05) and August (50 cents + 60 cents + $1.40 + 65 cents = $3.15) until all the money has been added to the jar. Keep the extra change on hand in case the students run out of the coins they need and must “trade” coins.

16. Instruct students to enter the monthly totals and add, writing the amount next to “Grand Total,” as you model on your displayed copy of Handout 1 ($2.85 + $4.05 + $3.15 = $10.05).

17. Hold the jar up so that the class can see it. Take a permanent marker and draw a line to show how high the coins reach in the jar.

18. Now show the class the 18-ounce jar. Take out all of the money from the 12-ounce jar and put it into the larger jar. Again, draw a line to show how high the coins reach in the 18-ounce jar. Compare the lines on both jars. Discuss the following:
• Looking at the marks on the jar, which jar appears to have more money? (Most students will suggest the smaller jar.)
• How much money was in the 12-ounce jar? ($10.05)
• How much money is in the 18-ounce jar? ($10.05)
• Why does one jar look as though it has more or less money? (Answers will vary.)
• Why did P.B. think his sister had taken some of his money? (P.B. thought his sister had taken his money because the height of the money in the jar was lower.)
• What money did Jill take from P.B.’s jar? (Six quarters, three dimes, four nickels, and two shiny pennies)

19. Remove six quarters, three dimes, four nickels, and two shiny pennies from the jar. Instruct the class to count as you remove the money. Discuss the following:
• How much money did Jill take out of P.B.’s jar? ($2.02)
• What did Jill put into P.B.’s jar? (Two one-dollar bills and two old pennies)

20. Choose a student to put two $1 dollar bills and two old pennies into the jar. Discuss the following:
• What is the difference between the money Jill took out of the jar and the money she put into the jar? (There is no difference in the amount of money Jill took out and put in. The only difference is that she took out all coins and replaced most of the coins with paper money.)
• Why did the paper money make it look as though there was less money in the jar? (Paper money takes up less space than coins.)
• Does this solve P.B.’s mystery? (No)

21. Finish reading the story and discuss the following:
• What was the mystery P.B. needed to solve? (Yesterday P.B.’s money filled the jar to the top of the big “P,” but this morning it didn’t.)
• What did P.B.’s cat do? (The cat knocked the jar off the window ledge.)
• What happened to the jar? (Maria caught the jar before it broke.)
• What did Jill, P.B.’s sister, say after Maria caught the jar? (“This time it didn’t break.”)
• Why did Jill’s comment surprise P.B.? (P.B. didn’t know that his jar had broken.)
• What did Jill do when she found the broken jar? (Jill found another peanut butter jar and put the money in it.)
• How did the cat knocking the jar off the window ledge solve P.B.’s mystery?  
(P.B. now knew that his allowance hadn’t shrunk. The new jar was bigger, so his money didn’t take up as much space as it had in the smaller jar.)

• How did P.B. prove this to his friends? (P.B. poured the same amount of juice into two different sized jars. P.B. then had his friends count his money, which they found to be the correct amount.)

22. Display the two jars of candy again. Ask the students if they think that one jar has more, less, or the same amount of candy as the other jar. (Answers may vary, but students are likely to say the same amount of candy.) As a class or working in small groups, instruct students to count the candy in each jar.

23. After verifying that each jar has the same amount, ask students why one jar looks as if it has more than the other. (The jars are different sizes.)

24. Ask the students where P.B. could keep his money that would be safer than keeping it in a jar on the window ledge? (Answers will vary and might include a piggy bank, drawer, or bank.) Tell students that the safest place to keep money is in a bank.

25. Explain that banks are businesses in the community that accept money from people and keep it safe and make loans to people who want to borrow money. Explain that banks often pay savers interest. Interest is the price of using someone else’s money. When people save in a bank, the bank pays those savers interest—extra money—so that the bank can use the money to make loans to other customers. Those customers repay the bank the loaned amount plus interest. Discuss the following:

• Do you or a family member have a bank account? (Answers will vary.)
• Have you visited a bank in the community? (Answers will vary.)

26. Point out that if P.B. saved his money in a bank, he wouldn’t have to worry about someone taking his money or knocking his savings jar off a ledge. Plus, each month the bank would add some extra money—interest—to P.B.’s account. Regardless of why P.B. is saving, he would reach his savings goal faster as the result of receiving that extra money—interest—earned each month.

27. (Optional) Allow the students to have several pieces of candy.

Closure

28. Review the key ideas in the lesson by asking the following questions:

• What is an allowance? (An allowance is money received from a parent or other adult in the family.)
• What is money earned for work called? (Income)
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- Give an example of work you've done to earn income. (Answers will vary but might include helping with yard work, caring for a neighbor’s dog, or doing extra chores.)
- Give an example of work an older brother or sister or neighbor has done to earn income. (Answers will vary but may include babysitting, mowing a lawn, or shoveling snow.)
- What is saving? (Saving is not spending money now and keeping that money to spend in the future.)
- Give an example of something you, a family member, or a friend has saved for. (Answers will vary but may include a new game, toy, vacation, or present.)
- What is spending? (Spending is buying things you want now.)
- When you spend, what do you give up? (When you spend now, you give up saving to buy things in the future.)
- When you save, what do you give up? (When you save, you give up buying things now.)
- What is a bank? (A bank is a business in the community that accepts money from people and keeps it safe and makes loans to people who want to borrow money.)
- What is interest? (Interest is extra money that banks pay savers in exchange for lending the savers’ money to people who want to borrow it. It is also extra money that people pay the bank when they borrow money.)
- Why are banks good places to save? (Banks pay interest and keep savers’ money safe.)

Assessment

29. Distribute a copy of Handout 2: A Savings Story to each student. Read the directions with the students, have them complete the activity, and then review the answers.

Handout 2: A Savings Story—Answer Key

Alisha is _______ saving _______ to buy a present for her grandmother for her birthday. Alisha has her money in a piggy bank. Her piggy bank is full, and she still needs to save $6.00 more. Alisha’s sister, Tanya, will pay Alisha $1.00 to clean Tanya’s room. The money Alisha earns for cleaning Tanya’s room is called _______ income _______. Alisha’s mother said she will take Alisha to open a savings account at the _______ bank _______. The bank will pay Alisha _______ interest _______ on her savings.

A: $0.60; B: $0.20; C: $0.12; D: $0.48
# Handout 1: P.B.’s Allowance

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<tr>
<th></th>
<th>Week 1</th>
<th>Week 2</th>
<th>Week 3</th>
<th>Week 4</th>
<th>Week 5</th>
<th>Totals</th>
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<td><strong>June Allowance</strong></td>
<td>50¢</td>
<td>50¢</td>
<td>50¢</td>
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<td>Week 1 ________</td>
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<tr>
<td><strong>Extra chores</strong></td>
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<td>15¢</td>
<td>30¢</td>
<td>15¢</td>
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<tr>
<td><strong>July Allowance</strong></td>
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<td>50¢</td>
<td>50¢</td>
<td>50¢</td>
<td>Week 4 ________</td>
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<tr>
<td><strong>Extra chores</strong></td>
<td>15¢</td>
<td>25¢</td>
<td>5¢</td>
<td>10¢</td>
<td>$1.00</td>
<td>Week 5 ________</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
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<td></td>
<td></td>
<td><strong>July Total</strong> ________</td>
</tr>
<tr>
<td><strong>August Allowance</strong></td>
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<td>50¢</td>
<td>50¢</td>
<td>50¢</td>
<td>—</td>
<td>Week 1 ________</td>
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<td>90¢</td>
<td>15¢</td>
<td>—</td>
<td>Week 2 ________</td>
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<tr>
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<td></td>
<td></td>
<td></td>
<td>Week 3 ________</td>
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<td><strong>June</strong></td>
<td>________</td>
<td>________</td>
<td>________</td>
<td>________</td>
<td>________</td>
<td>August ________</td>
</tr>
<tr>
<td><strong>July</strong></td>
<td>________</td>
<td>________</td>
<td>________</td>
<td>________</td>
<td>________</td>
<td><strong>Grand Total</strong> ________</td>
</tr>
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</table>

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Handout 2: A Savings Story

Directions: Read the following story. Use the words in the word bank below to complete the sentences.

<table>
<thead>
<tr>
<th>interest</th>
<th>bank</th>
<th>saving</th>
<th>income</th>
<th>spending</th>
</tr>
</thead>
</table>

Alisha is ______________ to buy a present for her grandmother for her birthday. Alisha has her money in a piggy bank. Her piggy bank is full, and she still needs to save $6.00 more. Alisha’s sister, Tanya, will pay Alisha $1.00 to clean Tanya’s room. The money Alisha earns for cleaning Tanya’s room is called ______________. Alisha’s mother said she will take Alisha to open a savings account at the _______________. The bank will pay Alisha ________________ on her savings.

Directions: Count the money in each bank. Draw a line from each bank to the correct amount of money in the boxes below.

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Standards and Benchmarks

National Standards in Economics

Standard 10: Institutions evolve and are created to help individuals and groups accomplish their goals. Banks, labor unions, markets, corporations, legal systems, and not-for-profit organizations are examples of important institutions. A different kind of institution, clearly defined and enforced property rights, is essential to a market economy.

- **Benchmark 1, Grade 4:** Banks are institutions where people save money and earn interest, and where other people borrow money and pay interest.

- **Benchmark 2, Grade 4:** Saving is the part of income not spent on taxes or consumption.

Standard 12: Interest rates, adjusted for inflation, rise and fall to balance the amount saved with the amount borrowed, which affects the allocation of scarce resources between present and future uses.

- **Benchmark 1, Grade 8:** An interest rate is a price of money that is borrowed or saved.

Standard 13: Income for most people is determined by the market value of the productive resources they sell. What workers earn primarily depends on the market value of what they produce.

- **Benchmark 2, Grade 4:** People can earn income by exchanging the use of their labor (physical or mental work) for wages or salaries.

National Standards in Personal Finance

Saving and Investing Overall Competency: Implement a diversified strategy that is compatible with personal goals.

- **Benchmark 4, Grade 4:** Piggy banks are places to hold savings. Savings accounts and savings bonds are ways to earn money from income not spent.

Common Core State Standards: English Language Arts, Grades 2-3

Reading: Literature

- **Key Ideas and Details**

  RL.2.1, RL.3.1: Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.

  RL.2.3, RL.3.3: Describe characters in a story (e.g., their traits, motivations, or feelings) and explain how their actions contribute to the sequence of events.
Speaking and Listening

- Comprehension and Collaboration

SL.2.2, SL.3.2: Determine the main ideas and supporting details of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.

Common Core State Standards: Mathematics, Grades 2

Operations & Algebraic Thinking

- Represent and solve problems involving addition and subtraction.

2.OA.A.1: Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.