

Lesson: The Great Investo and the Million Pennies

Materials:

Teacher will supply:

- document camera OR overhead projector and transparency pen
- pencils

Banker will supply 30 back-to-back copies of:

- Handout 1 – *Which Would You Choose?*
- Handout 2 – Delaware Map

If the classroom has a document camera, you will only need a paper copy of the handouts. If a doc camera is not available, you will find overhead transparencies of all activities in your packet.

Preparation:

Review the lesson ahead of time.

Before beginning the lesson, place Handout 1 on (under) the projector.

Tips for Bankers:

1. Write the story questions on post-it notes, then place the sticky notes on pages where the reading stops.
2. As you read, show the pictures to the students. You can show them using the document camera if one is available.
3. As you are having students record answers on Handout 1, you should do the same on your projected copy.
4. Distribute gifts from your bank at the **end** of the session.

Procedure:

1. **Introduce** yourself and your bank.
2. Begin the lesson by **asking** the following questions.
 - a. What does it mean to save money? (*Not spending your money right now, keeping it for later*)
 - b. Why is saving money important? (*Saving helps with making expensive purchases and with life's emergencies. It also helps you get what you want when you don't have enough money to buy it now.*)
 - c. How many of you save your money? (*Answers will vary.*)
 - d. What are some things you are saving for? (*Answers will vary.*)
3. **Distribute** Handout 1, one per student, and ask students to have pencils on their desks.
4. **Show** the cover of the book. **Read** the title and author. Tell students that Investo the Money Magician is up to his old tricks of thinking he can conjure up money without having to work for it.
5. Begin to **read** the story, stopping after page 7. **Explain:** Penny's motto is "**Every little bit saved makes a little bit more.**" Repeat that with me. (All recite the motto.) **Ask:** What does Penny mean by that? (*Even small amounts of money saved add up, so eventually you will have a lot of money. The younger you are when you begin to save, the more you will have later in life!*) Every time we hear Penny's motto we are going to say it with her.

6. Continue reading, stopping after page 10. **Ask:** How many of you would stop to pick up a penny if you saw one on the ground? Call on a student who raises a hand and ask “Why?” If someone has not raised a hand, ask “Why not?”
7. Continue reading. On page 11, have students recite the motto with Penny.
8. Continue reading. On page 13, have students recite the motto with Penny.
9. Continue reading, stopping after page 15. **Ask:** Can anyone tell us an adjective that describes Investo? (*impatient*) So what does Investo plan to do? (*speed up time until he has saved 1 million pennies*) On Handout 1 - Part 1A, have students write the number 1 million (*1,000,000*) on the first line displayed on the handout. As you write it on yours. **Ask:** How many dollars does 1 million pennies equal? (*ten thousand dollars*) Have students write that number (*10,000*) on the second line as you write it on yours.
10. Continue reading. On page 17, have students recite the motto with Penny.
11. Continue reading, stopping after page 19. **Ask:** What has Investo’s spell done? (*made time speed up*)
12. Continue reading, stopping after page 21. **Ask:** About how many years equals 1 million days? (*more than 2,000*) On Handout 1-- Part 1B, have students write 1,000,000 on the first line. Have students write 2,000 on the next line (as you write answers on your handout.)
13. Continue reading. On page 24, have students recite the motto with Penny.
14. Continue reading. On page 26, have students recite the motto with Penny.
15. Continue reading. On page 31, have students recite the motto with Penny.
16. Continue reading. On page 43, have students recite the motto with Penny.
17. Continue reading, stopping after page 44. **Ask:** What is interest? (*When you save money in a bank, the bank adds extra money into your savings account*) **Ask:** Does anyone know what compound means? (*to add to*) **Explain:** When you save money in a bank your money compounds. Your account earns even more because your interest earns interest; the longer you leave your money in the account, the more it will grow.
18. Finish reading the book. **Explain:** Remember Penny’s motto: Every little bit saved makes a little bit more. She started saving with just a penny that she found on the ground. Look at Handout 1 -- Part 2. Have a student read the following:

Penny is going to challenge The Great Investo to a savings race. She is going to offer the following two options.

1. \$50.00 right now that Investo can put in his piggy bank
2. \$.01 that she will put into a compounding savings account that will double each day for two weeks.

19. **Explain:** We are going to take vote. **Ask:** How many of you would take the \$50.00? (Have students write that number on the Handout as you write it on yours.) **Ask:** How many of you would take the penny? (Have students write that number on the Handout as you write it on yours.) Now use the margins of the Handout to figure the math to fill in the rest of the chart.
20. When students have finished the chart, **ask:** How much did the penny become after two weeks? (\$81.92) Have students supply the missing numbers on the Part 2 chart as you fill them in on your handout. (See Answer Key.) **Explain:** Interest from a bank doesn't actually increase that quickly, but any money you deposit earns interest and that interest also earn interest. The longer you leave money in your account, the more it grows!
21. (**Volunteers, if you do not have sufficient time to do Step #21 you can leave it for the teachers to complete as Enrichment.**) Have students turn their papers over to Handout 2 -- Delaware Map. **Explain:** One million is a huge number! As a matter of fact, one million pennies stacked on top of each other will make a pile 95 miles high! Ninety-five miles is almost the entire length of the state of Delaware. Find the following pairs of towns that are 95 miles from each other. On the map, circle the names of the towns and then trace the routes you would drive to get from:

- Claymont to Georgetown
- Newark to Selbyville
- New Castle to Delmar

Allow students time to do this activity, then call on students to trace the routes on your copy under the doc camera.

22. **Wrap-up** – Ask the following questions:
- What is interest? (*When you save money in a bank, the bank adds extra money into your savings account.*)
 - What is compound interest? (*the interest paid into your account earns interest*)
 - What does Penny mean when she says “Every little bit saved makes a little bit more”? (*Even small amounts of money saved add up, so eventually you will have a lot of money. The younger you are when you begin to save, the more you will have later in life!*) Why is that good advice? (*Answers will vary.*)

Name _____

Handout 1- Which Would You Choose?

Part 1 --

A. _____ pennies = _____ dollars

B. _____ days = more than _____ years

Part 2 -- Penny is going to challenge The Great Investo to a savings race. She is going to offer the following two options.

1. \$50.00 right now that Investo can put in his piggy bank
2. \$.01 that she will put into a compounding savings account that will double each day for two weeks.

Which option would you choose? Take a class vote:

Option 1 _____

Option 2 _____

Penny explained compound interest to Investo. We are going to fill in the chart to show what compound interest does to the amount we would earn. Use the margins of this paper to do the math.

	Piggy bank	Compounding account
Day 1	\$50.00	\$.01
Day 2		
Day 3		
Day 4		
Day 5		
Day 6		
Day 7		
Day 8		
Day 9		
Day 10		
Day 11		
Day 12		
Day 13		
Day 14		

Now which would you rather have -- \$50.00 or \$.01? Circle your answer.

Part 1 --

A. 1,000,000 pennies = 10,000 dollars

B. 1,000,000 days = more than 2,000 years

Part 2 -- Penny is going to challenge The Great Investo to a savings race. She is going to offer the following two options.

1. \$50.00 right now that Investo can put in his piggy bank
2. \$.01 that she will put into a compounding savings account that will double each day for two weeks.

Which option would you choose? Take a class vote:

Option 1 _____

Option 2 _____

Penny explained compound interest to Investo. We are going to fill in the chart to show what compound interest does to the amount we would earn. Use the margins of this paper to do the math.

	Piggy bank	Compounding account
Day 1	\$50.00	\$.01
Day 2	\$50.00	\$.02
Day 3	\$50.00	\$.04
Day 4	\$50.00	\$.08
Day 5	\$50.00	\$.16
Day 6	\$50.00	\$.32
Day 7	\$50.00	\$.64
Day 8	\$50.00	\$1.28
Day 9	\$50.00	\$2.56
Day 10	\$50.00	\$5.12
Day 11	\$50.00	\$10.24
Day 12	\$50.00	\$20.48
Day 13	\$50.00	\$40.96
Day 14	\$50.00	\$81.92

Now which would you rather have -- \$50.00 or \$.01? Circle your answer.

Name _____

Handout 2 – Delaware Map

How big would a stack of one million pennies be? Stacked on top of each other, one million pennies would make a pile 95 miles high! Ninety-five miles is almost the entire length of the state of Delaware. Find the following pairs of towns that are 95 miles apart. On the map, circle the names of the towns and then trace the routes you would drive to get from:

- Claymont to Georgetown
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