

# GRADE LEVEL 3-5

## WHICH IS BETTER – PIGGY BANK OR SAVINGS ACCOUNT?



### Teaching Notes

#### TOPIC

Saving Money in a Savings Account, Understanding Compound Interest, Saving Money for a Long-Term Goal

#### SUBJECT AREA

Social Studies

#### RELATED SUBJECT AREAS

Economics

#### LESSON OBJECTIVES

Students will:

- Explore the concept of earning compounded interest
- Discuss different ways to save money
- Make a plan to save for items they do not have enough money for now

#### IMPORTANT TERMS

savings account, interest, compound interest

#### LITERATURE CONNECTION

Honig, Debbie and Gail Kalit. *Growing Money: A Complete Investing Guide for Kids*. Penguin Putnam Books for Young Readers, 2001.

McGillian, Jamie Kyle. *The Kids' Money Book: Earning Saving Spending Investing Donating*. Sterling Publishing Company, Inc., 2004.

Schwartz, David M. *If You Made a Million*. William Morrow & Company, Inc., 1994.

#### INTERACTIVE EXTENSION

Students learn why saving money is important and identify places to save it. Students also learn what interest is and how it works to help money grow. The following is the Web address for the interactive activity that complements this lesson:

<http://www.citigroup.com/citigroup/financialeducation/curriculum/kids.htm> and click on "Which is Better - Piggy Bank or Savings Account?"

#### Estimated Time Requirement

40 - 45 minutes

#### Materials Needed

- Calculators, one per pair (optional)
- Chart paper and marking pen or chalkboard and chalk
- Copies of **Handout 1: How Your Money Can Grow** worksheet, one per student
- Play money, which can be bought at most toy stores and teacher supply stores
- Paper, one sheet per student
- Envelopes, one per student
- Poster boards, one per student pair
- Glue or glue sticks, one per student pair

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#### Introduction

Money deposited in savings accounts earns interest that can compound and grow more quickly than money in a piggy bank. In this lesson, students will explore the concept of saving money in a savings account with compounded interest and making a savings plan for an item for which they don't have enough money.

#### Teaching Strategies and Learning Activities

- Throughout the lesson, emphasize the Important Terms.
- Ask, "Which would you rather have: a \$100 bill or a penny that doubles every day for 30 days?" Elicit students' reasons.
- Divide class into pairs. Distribute calculators to each. Tell students how to calculate how much one penny doubled every day for 30 days amounts to. ( $.01 \times 2 =$ , then  $\times 2 =$ , then  $\times 2 =$ , and so on, 30 times.) Record this data on chart paper or chalkboard. Have students determine that one cent doubled for 30 days is \$5.4 million.
- Inform students that most **savings accounts** earn between 3 and 5% **interest**. Distribute **Handout 1: How Your Money Can Grow** worksheets to students. Explain how to use the table.
  - \$100 in a savings account earning 5% compounded for one year -  
 $\$100 \times 1.05$  (factor from table under 5% for 1 year) = \$105
  - \$100 in a savings account earning 5% compounded for five years -  
 $\$100 \times 1.2763$  (factor from table under 5% for 5 years) = \$127.63
- Use play money to visually demonstrate how money grows with **compounded interest**.
- Lead the class in a discussion of how a savings account helps you reach a goal faster than saving money in a piggy bank or jar at home.
- Distribute an envelope and sheet of paper to each student. Have students draw a picture of an item they would like to save for. Tell students to write the approximate cost of the item on the picture. Have students glue their picture on the front of the envelope.
- Tell students to experiment with calculating how much they would need to save each week or month, and the total number of weeks or months to reach the goal. When students have a reasonable plan, tell them to write it on the back of the envelope. Encourage students to take their envelope home and to start their plan!
- Contact a local bank or savings and loan institution to arrange for a guest speaker to visit your class. Ask the speaker to discuss the importance of

• **TIP:** Be sure to explain to students that the example at left was unrealistic, since investments don't compound at the rate of 200%, but was used to emphasize the value of compound interest.

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saving money in a bank or other financial institution and the advantage of earning interest.

- You may wish to work with a local bank or savings and loan institution to set up a banking program for your class.
- Review the Important Terms.

#### **Evaluation**

Divide the class into pairs. Distribute poster board, glue, play money, and calculators to each pair. Have students create a chart that shows how \$50 would compound over a 10-year and 20-year period.

# HANDOUT 1: HOW YOUR MONEY CAN GROW



## Compound Interest Table

Periods	1%	3%	5%	6%	8%
1	1.0100	1.0300	1.0500	1.0600	1.0800
2	1.0201	1.0609	1.1025	1.1236	1.1664
3	1.0303	1.0927	1.1576	1.1910	1.2597
4	1.0406	1.1255	1.2155	1.2625	1.3605
5	1.0510	1.1593	1.2763	1.3382	1.4693
6	1.0615	1.1941	1.3401	1.4185	1.5869
7	1.0721	1.2299	1.4071	1.5036	1.7138
8	1.0829	1.2668	1.4775	1.5938	1.8509
9	1.0937	1.3048	1.5513	1.6895	1.9990
10	1.1046	1.3439	1.6289	1.7908	2.1589
11	1.1157	1.3842	1.7103	1.8983	2.3316
12	1.1268	1.4258	1.7959	2.0122	2.5182
13	1.1381	1.4685	1.8857	2.1329	2.7196
14	1.1495	1.5126	1.9799	2.2609	2.9372
15	1.1610	1.5580	2.0789	2.3966	3.1722
16	1.1726	1.6047	2.1829	2.5404	3.4259
17	1.1843	1.6528	2.2920	2.6928	3.7000
18	1.1961	1.7024	2.4066	2.8543	3.9960
19	1.2081	1.7535	2.5270	3.0256	4.3157
20	1.2202	1.8061	2.6533	3.2071	4.6610