



Simple vs. Compound Interest | Lesson Plan

How does understanding the types of interest impact financial decision-making over a lifetime?

Students will grasp the mathematical concepts of simple and compound interest and their significant impacts on personal finance decisions, equipping them to make informed financial choices.

Learning Objectives:

- Identify and explain the differences between simple and compound interest.
- Apply the Rule of 72 to estimate the time it takes for an investment to double at a given interest rate.
- Analyze the implications of interest types on personal financial decisions, such as savings, loans, and credit card debt.
- Utilize problem-solving skills to make informed decisions about using interest to one's financial advantage.

Key Vocabulary:

- **Interest Rate:** Annual percentage charged or earned on principal.
- **Compounding Period:** How often interest is added to the principal.
- **Compound Interest:** Interest on both principal and accumulated interest.
- **Simple Interest:** Interest calculated only on the original amount.
- **APR (Annual Percentage Rate):** Yearly interest rate, including fees and costs.
- **Principal:** Original amount borrowed or invested.
- **Rule of 72:** Estimates years to double money with compound interest.

Educational Standards: CCSS Math Practice Standards: MP1, MP2, MP3, MP4, MP5;
CCRA Anchor Standards: CCRA.R.1, CCRA.R.2; CCRA.W.7, CCRA.SL.1, CCRA.SL.2, CCRA.SL.3, CCRA.SL.4

Academic Subject Areas: Financial Literacy, Decision Making, Personal Responsibility, Personal Finance

What You'll Need

- Video: *Ca\$h Cour\$e: Simple vs. Compound Interest* (Click [Here](#))
- Worksheet: *Ca\$h Cour\$e: Simple vs. Compound Interest* (Click [Here](#))
- Classroom whiteboard and dry-erase markers (or use a technology solution if available)
- Access to an online compound interest calculator



Lesson Plan (45 mins.)

Warm-Up: (10 mins.)

1. Start by asking the students if they have ever saved for or desired a high-priced gaming console. Then, introduce a hypothetical situation where the latest gaming console is priced at \$500, but the students don't have enough money to purchase it immediately. Pose the following questions:
 - Do you know what interest is in the context of finances? (Students may need a quick explanation about interest before proceeding with the lesson.)
 - If you saved money in a bank account that offers interest, how do you think the interest would help you reach your savings goal sooner?
 - What if you charged the gaming console on a credit card at a high-interest rate? How might the interest affect the total amount you end up paying?
2. Briefly explain that there are different ways interest can work, such as simple interest, where the calculation is based on the original amount only, and compound interest, where each period's interest is calculated on the accumulated total.
3. Discuss how these interest types can impact their savings or the cost of items bought on credit.
4. Go over the crucial financial terms that will be discussed in the video: interest rate, compounding period, compound interest, simple interest, APR, principal, as well as the Rule of 72.
5. Introduce the Rule of 72, a quick formula to estimate the number of years it will take to double an investment at a given annual rate of return. Explain that by dividing 72 by the annual interest rate, students can approximate how many years it will take for their money to double through compound interest.

Watch and Apply: (25 mins.)

1. Show the video *Ca\$h Cour\$e: Simple vs. Compound Interest*. This video will help students understand how simple interest and compound interest affect different financial scenarios.
2. After watching the video, distribute the "Cash Course: Simple vs. Compound Interest Worksheet." Give students about 10 minutes to complete it independently.
3. Review the worksheet as a class. Use the whiteboard to solve problems together, particularly focusing on areas where students might need further clarification or have questions.

Wrap-Up: (10 mins.)

1. Encourage students to discuss what they learned about simple and compound interest that was new to them. Ask them to consider how this information might affect their personal saving or spending habits, especially when it comes to making purchases on credit cards.

2. Revisit the key vocabulary introduced at the start. Ask students to define terms like "APR" or "Compounding Period" in their own words, using examples from the lesson to demonstrate understanding.
3. Have students reflect on how understanding simple and compound interest might change their approach to managing money. Encourage them to think about specific goals they have, like saving for a car or college, and which interest type would benefit them most.

Don't have time for the full lesson? Quick Activity (10-15 mins.)

Distribute the worksheet and allow students to complete it while they follow along with the video. Or, have students watch the video at home and use the worksheet as a quick quiz the next day in class.