LESSON PLAN

Compound Interest

GRADES
8 to 10

TIME
45 minutes

OVERVIEW

In this lesson, students will explore the importance of compound interest as it applies to long-term savings. Students will examine factors that influence compound interest and use them to formulate their own savings strategies. They will also learn how to use the Rule of 72 to quickly estimate how long it takes for an investment to double in value.

GOALS

- Understand the relationship between compound interest and its influencing factors
- Recognize the effects of compound interest in savings and in debt
- Develop long-term savings strategies
- Estimate investment earnings with the Rule of 72

OBJECTIVES

- Define principal, interest, simple interest and compound interest
- Isolate the factors that influence compound interest (compounding period, interest rate, investment duration) and use those factors to generate practical savings strategies
- Recognize effects of compound interest in savings and in debt
- Estimate how long takes for an investment to double using the Rule of 72

ASSESSMENT

An optional quiz has been provided with this lesson plan (the quiz is not factored into the lesson's 45-minute runtime).

Did you know? *This lesson plan explores concepts from Standard 3 (Saving) from the* ***Council for Economic Education's National Standards for Financial Literacy.***

MATERIALS

- ☐ **VIDEO 06**—*Compound Interest Mind Bend*
- ☐ **VIDEO 22**—The *Rule of 72*
- ☐ **ACTIVITY A**—*Compound Interest*
- ☐ **ACTIVITY B**—*Compound Interest and Answer Key*
- ☐ **HANDOUT 06**—*Compound Interest Mind Bend*
- ☐ **HANDOUT 22**—*The Rule of 72*
- ☐ **QUIZ**—*Compound Interest and Answer Key*

PREPARATION

- *Gather digital materials (videos)*
- *Print* **HANDOUT 06** *and* **HANDOUT 22** *for each student*
- *Prepare* **ACTIVITY A** *by having it ready to display*
- *Prepare* **ACTIVITY B***: Print at least one copy of each graph (pages 1–6). Print a copy of the worksheet (page 7) for each student. (Optional: have a copy of each graph ready to display.)*
- *(Optional) Print* **QUIZ** *(Compound Interest) for each student*

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TIME LINE

5 minutes	Topic intro
5 minutes	**ACTIVITY A** notes
20 minutes	Facilitate **ACTIVITY B**
5 minutes	Show **VIDEO 06** *(Compound Interest Mind Bend)*
5 minutes	Topic intro and show **VIDEO 22** *(The Rule of 72)*
5 minutes	Wrap up and distribute **HANDOUT 06** and **HANDOUT 22**
(Optional)	Assessment: **QUIZ** *(Compound Interest)*

INSTRUCTIONS

1. Ask your class the following questions:
   - What do you think your largest purchase will be in your lifetime?
   - How do you think people are able to save up enough money for those purchases?

   Explain that long-term savings goals are essential in order to afford large purchases such as higher education, vehicles, homes and retirement savings. Compound interest is what accelerates the value of those long-term savings.
2. Display **ACTIVITY A** and briefly review the definitions. Students may take notes.
   - Mention that students may already be familiar with compound interest as a formula in math class, but today's focus will be on saving and investing
3. Facilitate **ACTIVITY B**:
   - Provide each student with a worksheet (page 7 of **ACTIVITY B**)
   - Divide students into six groups and give each group a different graph to analyze
   - Allow groups 5–10 minutes to interpret their graph
   - Have each group present their findings to the class (Optional: display pages 1–6 of **ACTIVITY B** as groups present so that the entire class can follow along)
   - Use the answer key to ensure each group shares relevant information
   - Students may use the bottom half of their worksheet to take notes
4. Show **VIDEO 06**
   - Tell students to be on the lookout for factors they analyzed within the video
5. Intro and show **VIDEO 22**
   - Explain that the Rule of 72 is used to calculate how long it takes your investment to double
   - The Rule of 72 works only with investments with compound interest
6. Wrap up by sharing the following:
   - Compound interest makes long-term savings effective
   - Starting early and contributing often are good strategies for taking advantage of compound interest
   - The Rule of 72 is used to estimate how long it will take for a compounding investment to double
   - Compound interest isn't always a good thing—the same principles work against you in debt
7. (Optional) Distribute **QUIZ** for individual assessment

NOTES