BUILDING BLOCKS TEACHER GUIDE

Discovering the benefits of investing early

Students use an online calculator and answer questions to learn about the value of investing early.

Learning goals

Big idea

Investing early can mean more money for your financial future.

Essential questions

- How can investing early help my money grow?
- How can investing early help me meet my financial goals?

Objectives

- Understand the importance of investing as early as possible
- Learn how investing early pays off over time

What students will do

- Use an online calculator to discover how investments grow over time.
- Identify reasons to start investing as early in life as possible.

NOTE

Please remember to consider your students' accommodations and special needs to ensure that all students are able to participate in a meaningful way.

KEY INFORMATION

Building block:

- Financial habits and norms
- Financial knowledge and decision-making skills

Grade level: High school (9–12)

Age range: 13–19

Topic: Save and invest (Investing)

School subject: CTE (Career and technical education), English or language arts, Math, Social studies or history

Teaching strategy: Blended learning, Direct instruction

Bloom's Taxonomy level: Apply, Analyze

Activity duration: 45–60 minutes

National Standards for Personal Financial Education, 2021
Spending: 8-1, 12-9
Saving: 8-4, 8-5
Investing: 8-1, 8-7, 12-2, 12-4

These standards are cumulative, and topics are not repeated in each grade level. This activity may include information students need to understand before exploring this topic in more detail.

Preparing for this activity

- ☐ While it's not necessary, completing the "Comparing saving and investing" and/or "Investigating investing" activities first may make this one more meaningful.
- ☐ Print copies of all student materials for each student, or prepare for students to access them electronically.
- ☐ Become familiar with the U.S. Securities and Exchange Commission's (SEC's) free compound interest calculator at https://www.investor.gov/financial-tools-calculators/calculators/compound-interest-calculator.
- ☐ Obtain computers or tablets with Internet access so students can use the online calculator.
    - This also can be done as a whole-class activity by projecting the calculator on a screen from a computer.
- ☐ Make sure students have access to calculators.

What you'll need

THIS TEACHER GUIDE

- **Discovering the benefits of investing early** (guide) cfpb_building_block_activities_discovering-benefits-investing-early_guide.pdf

STUDENT MATERIALS

- **Discovering the benefits of investing early** (worksheet) cfpb_building_block_activities_discovering-benefits-investing-early_worksheet.pdf
- **Computers or tablets with Internet access**
- **The SEC's free compound interest calculator at** https://www.investor.gov/financial-tools-calculators/calculators/compound-interest-calculator
- **Calculators**

Exploring key financial concepts

Investing can help people reach long-term financial goals such as buying a home, starting a business, or retiring. Investments can increase in value over the years, and generally, the earlier you invest, the more time your investment has to grow. As a young person, one important advantage you have is time. Young people

TIP

Because financial products, terms, and laws change, students should be encouraged to always look for the most up-to-date information.

usually have more time to allow an investment to increase in value than older people do.

Time also can help manage the risks of investing. An investment's value can rise and fall over time – and it's possible to lose some or all of the money invested. But investors who hold on to an investment for the long term tend to come out ahead. Investing early can be a helpful strategy young people can use to meet their financial goals.

NOTE

It's important to emphasize that all investments, even savings products, have some level of risk. These risks include how readily investors can get their money when they need it; how fast their money will grow; whether they can lose some, all, or in some cases, more than their initial investment; and how inflation, taxes, market conditions, and other external factors may affect the value of their investment.

Teaching this activity

Whole-class introduction

- Ask students to share some long-term financial goals that people set aside money for.
  - Answers may include buying a house, paying for college, buying a new car, or retiring.
- Read the "Exploring key financial concepts" section to students.
- Be sure students understand key vocabulary:
  - **Annual return:** The profit or loss on an investment over a one-year period.
  - **Inflation:** Inflation occurs when the prices of goods and services increase over time.
  - **Invest:** To commit money to earn a financial return; the strategic purchase or sale of assets to produce income or capital gains.
  - **Investment:** Something you spend your money on that you expect will earn a financial return.
  - **Investment fees:** What you pay to use investment products and services.
  - **Rate of return:** The profit or loss on an investment expressed as a percentage.
  - **Return:** The profit or loss on an investment.
  - **Risk:** Exposure to danger, harm, or loss.
  - **Taxes:** Required payments of money to governments, which use the funds to provide public goods and services for the benefit of the community as a whole.

TIP

Visit CFPB's financial education glossary at consumerfinance.gov/financial-education-glossary/.

- Tell students they'll use an online calculator to explore how starting to invest at different ages affects the investment's value over time.
- Go to the SEC's compound interest calculator at https://www.investor.gov/financial-tools-calculators/calculators/compound-interest-calculator to show students what to expect.
- Explain that while the SEC tool is called a "compound interest calculator," it also can be used to calculate the returns in this activity.
- Be sure to clarify that the calculations are simplified to illustrate how investments can grow over time. In the real world, investment values rise and fall, and returns are affected by many factors, including inflation, investment fees, and taxes.

Individual or group work

- Distribute the "Discovering the benefits of investing early" worksheet to each student.
- Students can work individually, in pairs, in small groups, or as a class, but they should complete their own worksheet.
    - If you don't complete the activity as a class, give computers or tablets to each student, pair, or group.
- Tell students they'll calculate results for the three people in the worksheet scenario, assuming an annual return of 7 percent.
- They'll enter each person's information into the compound interest calculator one at a time.
- Be sure students are familiar with what they're expected to do in each step:
    - **Step 1. Initial investment:** Enter $500 for each person in the calculator.
    - **Step 2a. Monthly contribution:** Enter $25 as the amount each person plans to add to their investment each month.
    - **Step 2b. Length of time in years:** Enter the number of years each person has to invest until they turn 65: 50 for Maria, 40 for Jai, and 30 for Alex.
    - **Step 3. Estimated interest rate:** Enter 7 percent as the interest rate. Make sure students understand that:
        - While the calculator uses the term "interest rate," they should consider it to be "rate of return" for the purposes of this activity.
        - For most investments, the rate of return isn't guaranteed. Most investments involve risk, and it's possible to lose some or all of your money.
        - To keep the activity focused on a 7 percent return, students should skip the "Interest rate variance range" entry.

- **Step 4. Compound it:** Select "annually" for a 7 percent annual return.

- Students will enter each person's results on their worksheet and calculate the differences in each person's rate of return.
- Students will answer the reflection questions on their own.

Wrap-up

- Bring students back together and ask for volunteers to share their calculations.
- Ask volunteers to share their answers to the reflection questions.

Suggested next steps

Consider searching for other CFPB activities that address the topic of investing. Suggested activities include "Playing an investment game" and "Comparing stock investments".

Measuring student learning

Students' answers on their worksheets and during discussion can give you a sense of their understanding.

This answer guide provides possible answers for the "Discovering the benefits of investing early" worksheet. **Keep in mind that students' answers may vary.** The important thing is for students to have reasonable justification for their answers.

Answer guide

A. Maria would earn $136,687.19. Jai would earn $67,377.76. Alex would earn $32,144.36.

B. Maria would earn $104,542.83 more than Alex.

C. Maria would earn $69,309.43 more than Jai.

D. Jai would earn $35,233.40 more than Alex.

Reflection questions

Answers will vary.