



CLASSROOM ACTIVITY

Cash is King

OBJECTIVES

Students will be able to:

- **Explain** how cash flows into and out of a business
- **Compare** the impact of negative, positive, and steady cash flow on a business
- **Model** cash flow to match a business scenario

GRADE RANGE

6–12

DURATION

45–60 minutes

OVERVIEW

In this activity, students participate in a tabletop simulation of cash flow. After completing several rounds, they determine which rounds modeled positive, negative, and steady cash flow for a business. Students discuss the impact of cash flow on business and then participate in a card sorting activity to categorize inflows and outflows of cash. With more advanced students, the teacher can engage in an optional discussion about cash flow from operations, investments, and financing. The activity concludes with students considering the importance of cash flow and then submitting an exit ticket explaining how the saying “cash is king” applies to businesses.

STANDARDS CORRELATION

National Standards for Business Education

- Entrepreneurship (Levels 1, 2, and 3)
 - Identify the reasons for keeping accurate business records and financial statements (e.g., income statement, balance sheet, cash flow statement)
 - Identify types of financial statements and the type of data in each (e.g., income statement, balance sheet, cash flow statement)
 - Describe the various financial statements (e.g., income statement, balance sheet, cash flow statement)
- Accounting (Levels 1, 2, and 3)

- State and explain the business activities reported in a statement of cash flow (e.g., operating, investing, financing)
- Use the statement of cash flow to analyze business activities (e.g., operating, investing, financing)
- Analyze cash flow from operating activities to assess profitability and liquidity

MATERIALS

- **Ins and Outs Simulation Roles**—for display
- **Ins and Outs Student Capture Sheet**—one copy per group
- **Ins and Outs: The Tank**—one copy per group
- **Items for the simulation**—80-100 per group (See the Teacher Preparation section for more details)
- **Timers or a Wall Clock** (with a seconds hand)—at least one timer per group or a clock in view (the timer or clock app on a phone or tablet works well)
- **Cash in Many Forms Card Sort**—one per group, cut into cards in advance or provide a pair of scissors to each group
- **Venture Valley Connect: Cashing In**—one copy per student (optional)

ESSENTIAL QUESTION

What impacts cash flow and why does it matter?

TEACHER PREPARATION

This activity kicks off with a simulation of cash flow. Prepare for this by determining what items your students will use. They should be something that is easy to pick up and manipulate. Dried beans are a good and relatively inexpensive option. Small pieces of paper crumpled into balls can also be used. Avoid flat objects, such as coins, that can be challenging to pick up from a table. Each group should receive around 80-100 items. Depending on the size of the items you use, you may be able to count out the amount that would fit in a particular size of measuring cup or scoop and use that to create additional sets quickly. Store each set in a zip-top bag for easy distribution and reuse.

This classroom activity can be used as a standalone activity or in conjunction with the game, *Venture Valley*. Playing the game is not a prerequisite for the implementation of the activity; however, it can be used to drive home key points and offer additional extension opportunities. In particular, this activity provides an opportunity for students to reflect on the importance of cash in the game. Be sure to play the game ahead of your students so that you can provide prompting and support for students who may need extra help in making these connections.

PROCEDURE

Engage

- Inform students that you will be talking about an essential concept for entrepreneurs and business people in a bit, but for now, you want to talk about gas in vehicles and run a short simulation.
- Find out if any of the students have ever experienced running out of gas in a vehicle. If so, ask one to briefly describe the experience. If not, acknowledge that this is a situation most people hope to avoid—especially on a road trip or in areas where it might be challenging to get gas.
- Ask students what tools and information a driver might use to avoid running out of gas. Sample answers might include:
 - The fuel gauge which indicates how much gas is left in the tank.
 - The vehicle's current or general mileage, often shown as miles per gallon (some vehicles show this information based on current usage and conditions).
 - The capacity of the vehicle's gas tank.
 - When the vehicle was last filled with gas.
- Let students know that you are going to perform a short simulation. They will divide into teams and follow the directions you provide.
- Display the Ins and Outs Simulation Roles for the format you prefer (large groups of 4–5 students or small groups of 2–3 students). Review the roles and direct students to select roles while supplies are distributed.
- Distribute the following to each group:
 - **Ins and Outs Student** Capture Sheet (one per group)
 - **Ins and Outs: The Tank** (one per group)
 - Items or Counters (80+ to each group)
- Let students know to hold off on completing the bottom portion of the capture sheet until you tell them.
- Direct students to begin the simulation. Monitor groups and assist as needed.

Explore

- Ask students to imagine that the “tank” represents a business's bank account and the items represent money. The process of money going in and coming out represents the business's cash flow. The money in the “tank” or bank account at any given point is referred to as its cash or stock of cash.
- Let students know that cash flow is considered positive when there is more money coming in than going out. The opposite—more going out than coming in—leads to negative cash flow. When the two are the same, cash flow is considered stable.
- Direct students to review the results of each round and identify which round best simulates each cash flow scenario: **positive (2), negative (3), and stable (1)**.
- Share with students that cash flow is a key indicator of how well a company is doing.

- Debrief further with the following questions:
 - Which scenario(s) would they prefer if they were an entrepreneur or running a business and why?
Positive cash flow is the most desirable. Steady cash flow is good but not as desirable as positive cash flow. Negative cash flow is a sign the business doesn't have enough cash on hand to pay its obligations.
 - What situations might lead to a business having negative cash flow?
Not having enough sales to cover expenses; a customer might be late in paying an invoice leaving the business short on cash for a period of time; overheads or salaries may be more than the business can afford to spend.
 - Which do you think is more important for a business: cash flow or profit? Why?
There is no right or wrong answer to this question. Both are important metrics for a business. They can also sometimes be in conflict. For example, a business can have negative cash flow and still be profitable. Similarly, a business can have positive cash flow and not make a profit. Neither situation is good. Students might argue that cash flow is more important in the short term while profit is more important in the long term. Which one a person thinks is more important likely depends on whether they are focusing on the short or long term.
- Challenge students to work in their groups and create at least two additional rounds that simulate a particular cash flow scenario of their making. Invite groups to share the rates at which they had items come into and go out of the tank. What did the model simulate?
- Inform students that the money coming into and out of a business can take many forms. Distribute a set of cards from the **Cash in Many Forms Card Sort** to each group. Direct students to consider each item and determine if it represents money coming into (inflow) or out of a business (outflow). Refer to the **Cash in Many Forms Answer Key** and clarify student responses, as needed.
- (Optional) Let students know that businesses prepare and share cash flow statements that summarize their cash flow over a period of time (monthly, quarterly, or annually). Cash flow statements typically show cash flow in several categories. Distribute a copy of the **CF What? Student Capture Sheet** to each student, and direct them to note under which category each of the cards from the **Cash in Many Forms** activity would go. Refer to the **CF What? Answer Key** to check student answers.
 - Cash Flows from Operations (CFO): Also known as operating cash flow, this amount is calculated by taking the business's operating expenses and subtracting them from the sales.
 - Cash Flows from Investing (CFI): Also called investing cash flow, this amount shows how much money a company has made or lost from investments. Examples include the purchase of physical assets like equipment or property, investments in securities, and the sale of either of these. It is not uncommon for this number to be negative even in healthy companies. It shows they are investing in their business.
 - Cash Flows from Financing (CFF): Often referred to as financing cash flow, this refers to how a business moves cash between the company, investors, owners, or lenders. It may include debt, equity, and dividend payments.
- Challenge students to consider how cash flow information can be used by the following:
 - Entrepreneurs and/or business owners: **Cash flow shows whether or not a business can pay its bills. It can provide information to a business about things it can change to create positive cash flow, for example increasing sales and renegotiating payment terms for invoices.**

- Investors: **Investors generally want to put money into companies they think will perform well over time. Publicly traded companies (i.e., those for which an investor can buy and sell stock) must share their cash flow statements. This provides information for investors about the health of the company.**
- Conclude the activity by providing the following prompt for students to respond to as an exit ticket: There's an old saying, "Cash is king." Explain how this statement applies to businesses.

VENTURE VALLEY CONNECT

In *Venture Valley*, students are able to see their cash on hand for each business and track cash flow. As they progress through the game, decisions like changing prices, setting wages, and opening new locations impact both cash and profits. If your students are able to play *Venture Valley*—either in the classroom or on their own time—use the **Venture Valley Connect: Cashing in Student Capture Sheet** as a way for students to consider the decisions they made in the game and describe the impacts on cash flow. Consider opportunities for students to share their reflections and discuss how they might approach similar choices in future gameplay and/or in the real world.

Extend

- **Venture Valley:** The game, [Venture Valley](#), allows students to simulate decisions made by real-world entrepreneurs. Instruct students to play several rounds and pay careful attention to how their decisions impact cash flow in their businesses. What decisions led to positive cash flow? Did any result in negative cash flow? How often did they check the amount of cash in the business? What information did they gain from paying attention to cash during the game?
- **Get Real:** Invite students to locate a recent cash flow statement from a publicly traded company. Performing an online search with the name of the company and the term cash flow statement should lead to numerous versions. Students might refine their search by including the most recently finished year. Many sources share cash flow statements. Encourage students to view the same information from multiple sources. Challenge them to analyze the cash flow statements and look for information they learned about in the activity. In particular, encourage them to determine whether the Net Change in Cash is positive or negative. Let them know that negative numbers are often shown in parentheses. Also, point out where the values are described; for example, "All values in USD Millions" means the amount is in millions of U.S. dollars. If the cash flow statement has the number 42, this indicates \$42 million.
- **Compare and Contrast:** Provide students with cash flow statements from several businesses that they will recognize. Challenge them to compare and contrast the statements. Which company do they think has better cash flow?
- **Human Scale:** Take students to a large, open space such as a gym, courtyard, or outside. Recreate the simulations in the activity using people. Place one-third to one-half of the students in the tank, a predetermined area. Appoint a student to monitor the inflow and another to monitor the outflow. Challenge students to imagine a situation a business might encounter and model it with a particular rate going in and another going out.
- **Local Expert:** Contact a local bank branch and ask if someone that handles business lending would be available to speak to your class. Another option is an investment advisor. Better yet, get one of each. Ask them to share what they look at on a company's cash flow statement and what it tells them about the business. How does the information influence decisions they would make about either authorizing a loan or advising clients to invest.

Ins and Outs (Larger Teams)

- 1—The Placer:** Places items *in* the tank as instructed by the “in” timer.
- 2—The “In” Timer:** Keeps track of time and tells the placer when to move items into the tank.
- 3—The Remover:** Removes items *out* of the tank as instructed by the “out” timer.
- 4—The “Out” Timer:** Keeps track of time and tells the remover when to take items from the tank.
- 5—The Housekeeper:** Starts and stops the one-minute timer and makes sure items stay in the tank once placed.

Ins and Outs (Smaller Teams)

- 1—The Placer:** Watches the clock and places items in the tank according to the instructions.
- 2—The Remover:** Watches the clock and removes items from the tank according to the instructions.
- 3—The Timer and Housekeeper:** Starts and stops the one-minute timer, makes sure items stay in the tank once placed.



Ins and Outs

Directions: Work together to complete three rounds of this activity. Before getting started, determine who will perform each of the roles. The tank should contain 20 items at the beginning of round one. In rounds two and three, it starts with however many items were there at the end of the previous round. Each round will last one minute. Follow the instructions for each round, pausing between them to complete the table.

Round	Instructions	Results				Number of Items Added or Removed in One Minute		
		In	Out	Starting	Ending			Change
1	Add one item every 2 seconds							
2	Add one item every 2 seconds							
3	Add one item every 3 seconds							

Complete the table with the round that best describes each type of cash flow.

Round	Positive Cash Flow	Negative Cash Flow	Steady Cash Flow
Round			



Ins and Outs

A large, empty rounded rectangle with a thick black border, intended for writing or drawing.



Cash in Many Forms

Sales Revenue	Salaries and Wages	Money from Investors
Tax Refund	Overhead	Payment for Materials or Supplies
Proceeds from the Sale of an Asset	Grant for Research and Development	Equipment Costs
Loan Repayments	Loan from a Bank	Money from a Government Contract

Cash in Many Forms | **Answer Key**

<p>Sales Revenue Money Coming In</p>	<p>Salaries and Wages Money Going Out</p>	<p>Money from Investors Money Coming In</p>
<p>Tax Refund Money Coming In</p>	<p>Overhead Money Going Out</p>	<p>Payment for Materials or Supplies Money Going Out</p>
<p>Proceeds from the Sale of an Asset Money Coming In</p>	<p>Grant for Research and Development Money Coming In</p>	<p>Equipment Costs Money Going Out</p>
<p>Loan Repayments Money Going Out</p>	<p>Loan from a Bank Money Coming In</p>	<p>Money from a Government Contract Money Coming In</p>

CF What?

Directions: Review the three categories of cash flow below. Decide which cards should go in each category. Write your answers in the corresponding column.

CFO Cash Flows from Operations	CFI Cash Flows from Investing	CFF Cash Flows from Financing
<p>Also known as operating cash flow, this amount is calculated by taking the business's operating expenses and subtracting them from the sales.</p>	<p>Also called investing cash flow, this shows how much money a company has made or lost from investments. Examples include the purchase or sale of physical assets like equipment or property, and investments in securities.</p>	<p>Often referred to as financing cash flow, this refers to how a business moves cash between the company, investors, owners, or lenders. It may include debt, equity, and dividend payments.</p>

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<p>Sales Revenue</p> <p>Salaries and Wages</p> <p>Tax Refund</p> <p>Overhead</p> <p>Payment for Materials or Supplies</p> <p>Money from a Government Contract</p> <p>Grant for Research and Development</p>	<p>Money from Investors</p> <p>Proceeds from the Sale of an Asset</p> <p>Equipment Costs</p>	<p>Loan Repayments</p> <p>Loan from a Bank</p>

You've played the game, now make the connections!

In *Venture Valley* and the real world, businesses track the cash coming into and going out of the company. This information is used internally to make management decisions and externally by investors, lenders, and others.

Respond to the following prompts and demonstrate your understanding of what cash flow is and how it works.

1. Think back to the businesses you established in *Venture Valley*. How did the amount of cash a business had on hand influence your decisions?

2. Define cash flow in your own words.

3. Provide an example of how a decision made by a player in *Venture Valley* would impact cash flow for the business.