

Lesson Description

A series of short stories is used to illustrate each of the student expectations addressed for grade 3. Each story is followed by discussion and engaging activities.

In this first short story, Abby and Bret want to earn some money to buy a trampoline. They encounter a problem and go to Barkley, a wise old tree in Woodforest, who gives the children advice. Barkley shares with the children that the more they know; the more their income will increase. Students do an activity to help them discover that as the level of education increases, wages usually increase, too.

Texas Essential Knowledge and Skills (Target standards)

- **PFL Math 3.9A:** explain the connection between human capital/labor and income

Social Studies Texas Essential Knowledge and Skills (Connecting Standards)

- **Social Studies 3.7C:** explain the concept of a free market as it relates to the U.S. free enterprise system.
- **Social Studies 3.8A:** identify examples of how a simple business operates

Texas Essential Knowledge and Skills (Prerequisite standards)

- **Math 3.1:** Mathematical Process Standards
- **Math 3.2D:** compare and order whole numbers up to 100,000 and represent comparisons using the symbols $>$, $<$, or $=$
- **Math 3.4F:** recall facts to multiply up to 10 by 10 with automaticity and recall the corresponding division facts
- **Math 3.4G:** use strategies and algorithms, including the standard algorithm, to multiply a two-digit number by a one-digit number. Strategies may include mental math, partial products, and the commutative, associative, and distributive properties.

National Standards (Supporting standards)

- **CEE Earning Income 4.1:** People have many different types of jobs from which to choose. Different jobs require people to have different skills.
- **CEE Earning Income 4.2:** People earn an income when they are hired by an employer to work at a job.

CEE - Council for Economic Education

PFL Terms

- wage
- hourly wage
- income
- human capital
- wants
- needs
- free enterprise system

Time Required

30-45 minutes

Materials Required

- One copy of **Visual 3.1-1** and **Visual 3.1-2**
- One copy of **Activity 3.1-1** and **Activity 3.1-2** for each student and one for a visual
- One copy of **Activity 3.1-3** for each student (extension)
- Vocabulary Powerpoints: Human Capital and Free Enterprise System

Procedure

Note to teacher: Use the Human Capital and Free Enterprise System Powerpoints to review or frontload these terms.

Introduction

1. Read the unit introduction on **Visual 3.1-1**. This introduces both the setting and the main characters that students will come to know during the stories. The class is introduced to Bret and Abby who live in the Kingdom of Moneia (pronounced Mon-ē-ă). There is a wooded forest in the kingdom where a wise old tree named Barkley lives. Barkley helps the children find answers to their questions as they learn grade appropriate financial literacy concepts.

Engage

2. Begin the lesson by posing the following questions to students:
 - *What are the needs that you must have in order to live? (You must have food, clothing, and shelter.)*
 - *What are some things that you want? (Accept students' suggestions for items that they want. While clothes are needs, designer clothes are wants.)*
 - *How do people get these things? (People buy food, clothing, and shelter with money.)* If students suggest that some people grow their own food, make their own clothing, or build their own homes, continue questioning so that students realize they buy materials to be able to do these things.
 - *How do people get money? (They earn money from doing work or get money from gifts.)*
 - Remind students that money they earn is called income. *Why do some people have higher income than others? (Allow students to suggest a variety of responses.)*
 - *In the U.S. how do people decide what type of work they will do? (People choose what types of jobs they want. These choices are based on an individual's skills and level of education. The decision is also based on what types of jobs are available and where each individual is willing to live.)*

Explore/Explain

3. Tell students that they will hear a story about two children who live in the kingdom of Moneia. On their adventures, they are going to learn much useful information about money.
4. Read the story "The Ladder to Success" to your class. The story is found on **Visual 3.1-2**.
5. After reading the story, ask questions such as the following to check that students understood the story:
 - *Why did Abby and Bret jump out of bed on Saturday morning? (They were excited about going to the carnival.)*
 - *What were they planning to do at the carnival? (They planned to sell strawberry*

ice cream.)

- *What problem did they have with their ice cream? (They didn't know how to keep it frozen.)*
- *Who did they ask to help them with their problem? (They asked Barkley.)*
- *What secret did Barkley share with the children? (He said they were lucky enough to live in a country that believes in the free enterprise system.)*
- *What is the free enterprise system? (The free enterprise system allows people to make choices about what type of work they do and what goods and services they buy.)*
- *What benefit would training and education provide? (Training and/or education provides the possibility of increasing your income.)*
- *What do you think that means? (Accept reasonable responses. The more education you have and/or the more training you have, the higher your income will most likely be.)*

Explore

6. Distribute a copy of **Activity 3.1-1** to each student. You may find it helpful to also use a copy of **Activity 3.1-1** as a visual as you question students and guide them to completing the page. Tell students that the ladder shows the different levels of workers at the Creamy Creations Company. Under each job is a place to write the hourly wage for doing that job. Choices are found in the box beneath the ladder. In the column to the right, students are to choose from the box on the lower right and write the level of education/training needed for each job on the ladder.

7. Question students to guide them in completing the activity.
 - *What are the jobs workers have in the Creamy Creations Company? (The jobs are Ice Cream Server, Ice Cream Mixer, Store Manager, Creator/Researcher, District Manager, and Business Owner.)*
 - *What else does this table tell us? (The Store Manager earns \$20.00 an hour. There are education requirements for each job.)*
 - *Look at the range of wages listed. We know the Store Manager earns \$20.00 an hour. Where do you think we should start in determining the other wages? (Sample response: We could start with the highest or the lowest salary.)*
 - *Why do you think that? (Sample response: The ladder means that the lowest wage is at the bottom and each rung up the ladder is a higher wage.)*
 - *So what do you think the Ice Cream Server earns? (The ice cream server earns \$8.00 an hour.)* Instruct students to write \$8.00 an hour in the space below the Ice Cream Server.
 - *What do you think the Ice Cream Mixer earns? (The ice cream mixer earns \$10.00 an hour.)* Instruct students to write \$10.00 an hour in the space below the Ice Cream Mixer.

8. Continue questioning in this manner over the remaining jobs. Provide time for students to write each wage earned below the job name.
 - *Why do you think a Store Manager earns more than the Ice Cream Server? (Sample responses: He/she works harder. He/she works more hours. He/she has more training/education.)*

9. Direct students' attention to the column on the right, Education Needed. Begin at the bottom of the ladder and guide students in completing the table.
 - *How much education do you think the Ice Cream Server needs? (The Ice Cream Server has no special requirements other than being a high school student.)* In most places, one has to be 16 years of age to be employed. Students should write "High School Student" to the right of Ice Cream Server.
 - *How much education do you think the Ice Cream Mixer needs? (The Ice Cream Mixer must be a high school graduate.)* Students should write High School Graduate to the right of the Ice Cream Mixer.
 - *What about the Store Manager? How much education does he/she need? (The Store Manager must have 2 years of college.)* Students should write 2 years of college to the right of the Store Manager.
10. Provide time for students to complete the table. Check their work. Students may wish to discuss that both the District Manager and the Creator/Researcher are both college graduates. However, the Creator/Researcher has a focus on food development and the District Manager has a focus on business. Ask students why they think there is a difference in their wages.
11. Ask students if they see any kind of pattern in the ladder table. They should discuss any patterns they find with their partners. Then ask for volunteers to share their observations. Students may observe that the wages increase as the rungs move toward the top of the ladder. As the wages increase, the education needed also increases. Be sure that students see this relationship.
12. Ask students if they see a connection between the human capital required and how much the person in each position earns. *(The more training, knowledge and skills a worker has the more salary they typically earn.)*

Elaborate

13. Distribute **Activity 3.1-2** to students. Since students found the patterns previously, they should apply this understanding to the column on the right, Fewest Years to reach Education Needed. Ask students how they will know what to put in the column, Daily Earnings. Students should recognize that they must multiply the hourly wage times 8 to determine the daily earnings.

Evaluate/End

14. Use a copy of **Activity 3.1-2** as a visual to go over students' responses to **Activity 3.1-2**. Fill in the chart as students volunteer their answers. Have students look at the completed chart and make a generalization from something they observe in the chart. Students should write this generalization on the back of **Activity 3.1-2**.

EXTENSION

1. Use **Activity 3.1-3** for students to solve the following ice cream problem:

Abby and Bret walked along Main Street one Saturday afternoon. It had been a long hot day. They spotted Mr. Bean's Ice Cream and Soda Shoppe. Both decided it was time to spend a little of their income on a cool treat. Bret had walked Mr. Brown's dog that morning and made \$3.00. Abby had the opportunity to babysit the Smith's

twin boys that morning and had made \$3.50. What do you think Abby and Bret bought while in Mr. Bean's Ice Cream and Soda Shoppe? Remember Abby and Bret are continuing to save for their trampoline. How much do you think each child saved of their income?

2. Have the students research beginning salaries and education/training needed for 3-5 different jobs. Students can construct a chart to show their findings. Some job suggestions are grocery clerk, fireman or policeman, secretary, teacher, nurse, or lawyer.

Visual 3.1-1

Abby and Bret live in a wonderful country called Moneia (pronounced Mon-ē-ă). It is a magical land where the forest is lush, green and beautiful. Within the forest is a tall, lumbering pine tree. The tree has been there for over 100 years. It has stood tall against wind, rain, snow and ice.

One day Abby and Bret were walking among the trees and heard a soft moan. They followed the sound to what seemed to be the tallest pine tree in the forest. All of a sudden the forest became perfectly quiet. Not a sound could be heard. Abby and Bret became very frightened.

They heard the moan again. It seemed to be coming from the pine tree. Looking up, they noticed a small branch that looked as if a strong wind had caused the branch to puncture the tree. They carefully pulled the branch out and immediately heard a sigh of relief. Abby and Bret held their breath because they didn't know who or what had made that sound.

As they began to back away, a voice came from that tree. It was a kind voice.

"Hello, children. I want to say thank you for removing that irritating twig. You are very kind. What are your names?"

"I'm Abby and this is my brother Bret. Who are you?"

"I'm the oldest tree in the forest. Some think that I am the wisest. They call me Barkley of Woodforest. Your kindness will not go unnoticed. Please let me help you in any way I can, at any time."

"I have helped many of my friends learn about spending and saving, borrowing and lending. Saving for the hard winter is an important skill when living in the forest. I stay green all year long and have become an expert on anything that is green, including money."

Abby and Bret thanked Barkley and continued through the forest on their way home.

The children couldn't believe what had just happened. It was a huge surprise to realize that they had discovered a wise old tree right in the middle of their forest. The adventure was about to begin.

Visual 3.1-2

The Ladder to Success

Abby and Bret were excited about the Critter Carnival that was coming to the wooded forest. It was finally Saturday morning, and this was the big day. Abby and her brother Bret had been waiting for this day for weeks. The children were excited to see so many choices. Some booths sold goods like handmade crafts while others provided services like games to play. Other booths had delicious food for sale. That is the kind of booth Abby and Bret would have.

Abby and Bret jumped out of bed right away. There was so much to do before they could leave for the carnival. This brother and sister had decided to make homemade ice cream to sell at the carnival. They had discovered that no one else would be selling ice cream. For this reason, the children hoped that they would have a popular product that would have them going home with a full money box. They would sell strawberry ice cream with fresh strawberries on top. The waffle cones were already made. All that was left for them to do was to mix the ingredients for the ice cream, freeze it, and they would be off to the carnival.

Abby and Bret wanted to have a trampoline with safety nets of their very own. They decided beforehand that they were going to have to generate an income if they were ever going to get a trampoline. They would need to be paid for work they did.

Everything was set; the ice cream mixture was ready. Now they only had to freeze it.

That is when Abby and Bret began to think. “How will we take a freezer to the carnival? It’s too heavy, especially when it is full of ice cream!” Abby asked.

“We need some advice,” said Bret.

“Who would know something about freezing?” asked Abby.

“I know,” said Bret. “It freezes in the forest every winter. Maybe Barkley, that wise old pine tree would know.”

Bret and Abby headed to the forest and found Barkley sound asleep.

“Hey, Barkley, wake up. Abby and I have a problem and we need your help.”

“Oh... Oh, yes?” Barkley answered sleepily.

“How do you freeze ice cream without putting it in a freezer?” asked the children.

“That’s easy. My mom use to make homemade ice cream. Put the container in the middle of your ice cream maker bucket. Put rock salt around your container and turn the crank. That’s the hard part. Before long it will be frozen.”

“Now, here is the big question,” asked Barkley. “Why are you making ice cream?”

“Barkley, we need to make money to buy a trampoline. We need an income. The more ice cream we sell, the more money we will make. The more money we make, the higher our income becomes. Before long we’ll be able to afford a trampoline,” Bret explained.

“I’m very proud of what you have done so far,” praised Barkley. “You already have the capital needed like buckets, serving spoons and containers. You also

have the human capital needed because you have watched your parents and understand how to make your product. You have a plan for how and where to sell your ice cream.”

“I have secret for you, you’re lucky enough to live in a country that believes in the free enterprise system,” Barkley said quite seriously. “The more you know, the more your income will increase. You need training to get ahead. Think about getting more education at a college or university. Now you are learning about having your own business. As you get older you may decide that you like being an entrepreneur and start your own business. Later you might decide to take business classes. Some people study how to run a business in college for 5 years and get a MBA degree. That means Master of Business Administration. And never forget about hard work. The Creamy Creations Company works hard to make the best ice cream they can possibly make. The more people who buy their ice cream, the more money they make.”

“The Creamy Creations Company would tell you to work hard, learn as much as you can about running a business, and be honest and creative,” added Barkley. “Good luck kids. I hope your work pays off and you get your trampoline.”

Abby and Bret waved goodbye to Barkley and ran home to freeze their ice cream.

Activity 3.1-1

Determine the hourly wage and the education needed for each worker. Use the information in the boxes below to complete the table.

	Education Needed
Business owner Wage:	
District Manager Wage:	
Creator/researcher Wage:	
Store Manager Wage: \$20.00 an hour	
Ice cream Mixer Wage:	
Ice cream Server Wage:	

- Wages
- \$20.00 an hour
 - \$ 8.00 an hour
 - \$50.00 an hour
 - \$25.00 an hour
 - \$40.00 an hour
 - \$10.00 an hour

- Education Needed
- 2 years of college
 - College graduate with a focus on food development
 - High School graduate
 - College graduate with a focus on business
 - High School Student
 - Master of Business Administration

Key 3.1-1

Determine the hourly wage and the education needed for each worker. Use the information in the boxes below to complete the table.

		Education Needed
	Business owner Wage: \$50.00 an hour	Master of Business Administration
	District Manager Wage: \$40.00 an hour	College Graduate with focus on business
	Creator/researcher Wage: \$25.00 an hour	College Graduate with focus on food development
	Store Manager Wage: \$20.00 an hour	2 years of College
	Ice cream Mixer Wage: \$10.00 an hour	High School Graduate
	Ice cream Server Wage: \$8.00 an hour	High School Student

Activity 3.1-2

Determine the daily earnings based on an eight hour workday. Then use the information in the box at the bottom to approximate the age to reach education needed.

Daily Earnings	Position	Education Needed	Approximate Age to Reach Education Needed
	Business owner Wage: \$50.00 an hour	Master of Business Administration	
	District Manager Wage: \$40.00 an hour	College Graduate with focus on business	
	Creator/researcher Wage: \$25.00 an hour	College Graduate with focus on food development	
	Store Manager Wage: \$20.00 an hour	2 years of College	
	Ice cream Mixer Wage: \$10.00 an hour	High School Graduate	
	Ice cream Server Wage: \$8.00 an hour	High School Student	

Approximate Age to Reach Education Needed: 20, 24, 16, 22, 18, 22

Key 3.1-2

Determine the daily earnings based on an eight hour workday. Then use the information in the box at the bottom to approximate the age to reach education needed.

Daily Earnings	Position	Education Needed	Approximate Age to Reach Education Needed
\$400	Business owner Wage: \$50.00 an hour	Master of Business Administration	24 years
\$320	District Manager Wage: \$40.00 an hour	College Graduate with focus on business	22 years
\$200	Creator/researcher Wage: \$25.00 an hour	College Graduate with focus on food development	22 years
\$160	Store Manager Wage: \$20.00 an hour	2 years of College	20 years
\$80	Ice cream Mixer Wage: \$10.00 an hour	High School Graduate	18 years
\$64	Ice cream Server Wage: \$8.00 an hour	High School Student	16 years

Activity 3.1-3

Name _____

Abby and Bret walked along Main Street one Saturday afternoon. It had been a long hot day. They spotted Mr. Bean's Ice Cream and Soda Shoppe. Both decided it was time to spend a little of their income on a cool treat. Bret had worked Mr. Brown's dog that morning and made \$3.00. Abby had the opportunity to babysit the Smith's twin boys that morning and made \$3.50. What do you think Abby and Bret bought while in Mr. Bean's Ice Cream and Soda Shoppe? Remember Abby and Bret are continuing to save for their trampoline. How much do you think each child saved of their income?

Choose Your Flavor	Cost Per Dip	Topping	Cost of Topping
Vanilla	1 Dip \$.50	Sprinkles	\$.10
Chocolate	2 Dips \$ 1.00	Chocolate Chips	\$.20
Strawberry	3 Dips \$ 1.50	Whipped Cream	\$.50
Chocolate Chip	4 Dips \$ 2.00	Nuts	\$.75
Cookie Dough	5 Dips \$ 2.50	Jelly Beans	\$1.00

Bret earned \$3.00. What choices do you think he made?

Flavor: _____

Number of dips: _____

Cost \$ _____

Topping(s): _____

Cost \$ _____

Total Cost \$ _____

How much of his income did Bret still have after buying ice cream? _____

Abby earned \$3.50. What choices do you think she made?

Flavor: _____

Number of dips: _____

Cost \$ _____

Topping(s) _____

Cost \$ _____

Total Cost \$ _____

How much of her income did Abby still have after buying ice cream? _____