#### INTERMEDIATE CURRICULUM

# Please utilize the curriculum as is, or copy the document to modify it (Grades 3-5) (Approximately 40 mins)

## Lesson #1 - Supply & Demand

#### Goals:

 To help students conceptualize the relationship between supply and demand in terms of pricing.

## **Diversity, Equity & Inclusion:**

- Discuss how knowledge of supply & demand over a lifetime can lead to enhanced decision-making, increasing intergenerational wealth
- Discuss how the diversity of suppliers and consumers may influence the supply and demand for goods and services

### Vocabulary used:

- Supply: how much of a good that is available.
- Demand: how much of something that people want.
- Producer: Someone who makes or grows goods. They determine prices based on supply and demand.
- Seller: Someone who sells a product
- Consumer: Someone who buys goods or services. YOU!
- Product: Something that someone makes, grows, does
- Service: Work that someone does for someone else

#### Materials Needed and Links to Resources for Lesson:

- Interemdiate STF Curriculum Slides (Lesson 2 Section)
- Supply & demand activity.

#### Lesson



## Intro/Hook:

Bring in a candy bar and show the class. Then, tell them that you're going to conduct an imaginary auction for the candy bar. Tell them to imagine that they have \$25 of their own money (again, just hypothetical). Then, start at 50 cents and each time there's more than one person raising their hand, increase the price (.50, \$1, \$2, \$3, \$5, etc.). See how high the price gets before only one person wants to buy.

## Supply & Demand:







- Why did we just do this?
  - o To focus on the spend jar
  - To introduce you to SUPPLY and DEMAND. Two VERY important concepts when it comes to *spending* money.
  - o Supply: how much of a good that is available.
  - Demand: how much of something that people want.

- Example: Supply and demand determining the price of bananas.
  - A lot of people in line. Ask: Does this increase or decrease \$ of bananas?
  - Very few people in line: Ask: Does this increase or decrease \$
     of bananas?
  - A lot of bananas. Ask: Does this increase or decrease \$ of bananas?
  - Very few bananas: Ask: Does this increase or decrease \$ of bananas?



- Back to our example: Supply and demand determining the price of a PayDay.
  - Was our supply high or low? Low.
  - o Was our demand high or low? High.
  - What happened to the imaginary price? It was much higher than normal.



- Real-life example: Supply and demand determining the price of an Xbox.
  - Discuss in terms of the price being moved by supply and demand.



- We're going to practice to see if we have a good understanding, but first want to introduce you to 4 concepts.
- Introduce 4 major concepts for students to understand in terms of spending money.
  - o Seller: Someone who sells the product
  - o Consumer: Someone who buys goods or services. YOU!
  - Product: Something that someone makes or grows
  - Service: Work that someone does for someone else

#### **ACTIVITY**



Olivia Rodrigo just released a new hit song that is popular around the world. She is going on tour and playing in New York City. 80,000 fans want to see her concert, but only 4,000 tickets are available.

- What is the supply of concert tickets?
   What is the demand of concert tickets?
   How should Olivia Rodrigo price her concert tickets?



Summer is coming and customers (consumers) are looking to buy fun and bright clothes. Nike (producer), however, produced too much clothing for winter. The winter clothes (product) are no longer selling and are beginning to collect dust on the shelves.

- a. What is the supply of this product?b. What is the demand of this product?c. How should they price this product?





Pink Beanie Babies (product) are very popular right now but the producer of the animals only made a small amount in pink. A popular celebrity was seen holding a pink one. People are looking to get their hands on a pink Beanie Baby!

- a. What is the supply of this product?b. What is the demand of this product?c. How should they price this product?

Apple (producer) just increased the production of the IPad (product) with Retina display from 1000 per day to 2,000 per day. Little did they know, a new product from Samsung came out that customers (consumers) are more interested in purchasing.

- a What is the supply of this product?b. What is the demand of this product?c. How should they price this product?



Dairy Queen's (producer) Blue Galaxy Blizzard' was just featured on the world's most popular website as being the best frozen dessert of the year. Customers (consumers) have been asking all about them! The local Dairy Queen onl has 20 Blue Galaxy Blizzards (product) left!



- What is the supply of this product? What is the demand of this product? How should they price this product?



It's winter time in Minnesota and a large grocery store in town only has 10 cartons of blueberries left. People, however, love blueberries regardless of the climate because of their health benefits and want to buy a lot.



- a. What is the supply of this product?b. What is the demand of this product?
- c. How should they price this product?



The Indianapolis Colts were in the Super Bowl. Unfortunately, they lost! Dick's Sporting Goods purchased extra Colts apparel for customers, but no one wants to buy it anymore because they lost.

- a. What is the supply of this product?b. What is the demand of this product?
- c. How should they price this product?





Activity (see below):

- Print activity slides in intermediate STF curriculum. Print answer sheet from below.
- Post 7 different stations around the classroom, each of which discuss a product.
- Students, as small groups, should answer on their sheets going around to each station.
- Reconvene class to check answers (see answer sheet below).

# As a Consumer, Use Supply & Demand to Your Benefit

- As a consumer, use this information to your benefit!
  - Buy the newest cell phone or wait for it to increase in supply and reduce in demand?
  - Go to a college that everyone else wants to go to (expensive) or go to a good school, but with less name recognition.
  - Buy the latest Madden game right when it comes out or wait for demand to drop.



## Closing/Exit:

- Think about a real-life product that you've waited to buy and hope the demand drops.
  - o Tell your parent(s) about it.

## **ANSWERS**

Circle either HIGH or LOW below.	Name:		
#1. Olivia Rodrigo a. What is the supply of tickets?		HIGH	LOW
b. What is the demand for the tickets?		HIGH	LOW
c. How should they price the tickets?		HIGH	LOW
#2. Nike a. What is the supply of this product?		HIGH	LOW
b. What is the demand of this product?		HIGH	LOW
c. How should they price this product?		HIGH	LOW
#3. Beanie Baby a. What is the supply of this product?		HIGH	LOW
b. What is the demand of this product?		HIGH	LOW
c. How should they price this product?		HIGH	LOW
#4. Apple a. What is the supply of this product?		HIGH	LOW
b. What is the demand of this product?		HIGH	LOW
c. How should they price this product?		HIGH	LOW
#5. Dairy Queen a. What is the supply of this product?		HIGH	LOW
b. What is the demand of this product?		HIGH	LOW

c. How should they price this product?	HIGH	LOW
#6. Blueberries a. What is the supply of this product?	HIGH	LOW
b. What is the demand of this product?	HIGH	LOW
c. How should they price this product?	HIGH	LOW
#7. Dick's Sporting Goods a. What is the supply of this product?	HIGH	LOW
b. What is the demand of this product?	HIGH	LOW
c. How should they price this product?	HIGH	LOW

# ANSWER KEY (ANSWERS ARE <u>UNDERLINED</u>)

#1. Olivia Rodrigo		
d. What is the supply of tickets?	HIGH	<u>LOW</u>
e. What is the demand for the tickets?	<u>HIGH</u>	LOW
f. How should they price the tickets?	<u>HIGH</u>	LOW
//a		
#2. Nike d. What is the supply of this product?	<u>HIGH</u>	LOW
e. What is the demand of this product?	HIGH	<u>LOW</u>
f. How should they price this product?	HIGH	<u>LOW</u>
<i>"</i>		
#3. Beanie Baby	_	
d. What is the supply of this product?	HIGH	<u>LOW</u>
e. What is the demand of this product?	<u>HIGH</u>	LOW
f. How should they price this product?	<u>HIGH</u>	LOW
#4. Apple		
d. What is the supply of this product?	<u>HIGH</u>	LOW
e. What is the demand of this product?	HIGH	<u>LOW</u>
f. How should they price this product?	HIGH	<u>LOW</u>

#5. Dairy Queen d. What is the supply of this product?	HIGH	LOW
e. What is the demand of this product?	<u>HIGH</u>	LOW
f. How should they price this product?	<u>HIGH</u>	LOW
#6. Blueberries d. What is the supply of this product?	HIGH	<u>LOW</u>
e. What is the demand of this product?	<u>HIGH</u>	LOW
f. How should they price this product?	<u>HIGH</u>	LOW
#7. Dick's Sporting Goods d. What is the supply of this product?	<u>HIGH</u>	LOW
e. What is the demand of this product?	HIGH	<u>LOW</u>
f. How should they price this product?	HIGH	<u>LOW</u>

## (Grades 3-5) (Approximately 30 mins)

## Lesson #2 - 3 Buckets, Saving, Compound Interest, and Investing

#### Goals:

- To help students conceptualize how they can use the money they acquire.
- To emphasize the importance of saving.
- To understand the power of compound interest and its effects in investing.
- To understand different investment markets.

## **Diversity, Equity & Inclusion:**

- Discuss the impact of economic inequality and financial hardship and how they can affect the ability to save money
- Discuss the impact of systemic barriers on saving money
- Discuss how investing and compound interest can enable intergenerational wealth

## Vocabulary used:

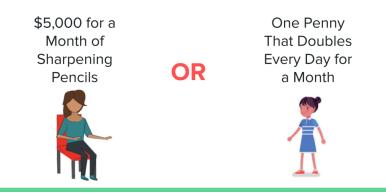
- Giving (philanthropy)
- Spending
- Saving
- Compound Interest
- Investing
- Interest

#### Materials Needed and Links to Resources for Lesson:

• Interemdiate STF Curriculum Slides (Lesson 1 Section)

#### Lesson

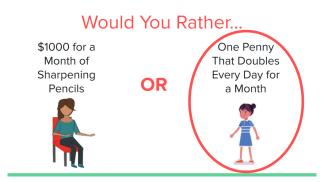
## Would You Rather...



## Intro/Hook:

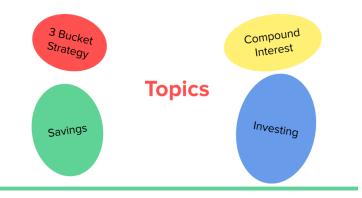
- Penny Problem:
  - Show slide above.
  - Offer one student a choice: \$20,000 the next month for a simple class chore (being in charge of the pencil sharpener or something) OR one penny for the first day, two for the second, four for the third and so on. Have students stand or sit simultaneously after giving them about 30 seconds to think about it.

Number	Penny		
of Days	Value	Number	Penny
1	\$0.01	of Days	Value
2	\$0.02		
3	\$0.04	28	\$1,342,177.28
4	\$0.08	29	\$2,384,354.56
5	\$0.16	30	\$5,368,709.12
6	\$0.32		



### o Questions:

- Was the answer surprising to you?
- Why do you think we did this problem?
  - All has to do with savings. More later.



## Outline Lesson:

- 3 bucket strategy
- Savings
- Compound interest
- Investing



# Have you ever been given or received money?

Ask students to pair up with a partner and discuss this question.
 Then, come back to the larger group and ask one or two people to share.





# Philanthropy

Love of Humans







## **Bucket strategy:**

- QUICKLY explain 3 buckets (savings, giving, and spending). Kids have choices when they receive money (jobs, chores, birthday etc). 3 general choices. WAIT for the savings bucket, until introducing the two others.
  - Giving: Money to be donated. Introduce word 'philanthropy'.
     Write on board.
    - What would you want to give money toward?
  - Spending: Money to be spent now.
    - What could this be used for?



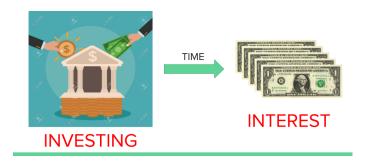
# Why is Saving Important?



## Savings & compound interest:

• Savings: Money to be used later.

 Ask: Why is saving important? (Xbox, car, bike, emergency, college, retirement). Achieve goals. Not struggle throughout life. Have Choices.



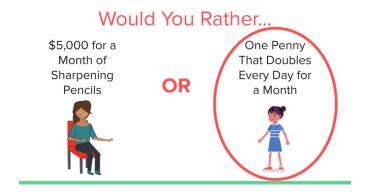
- Recall the question I asked you before. Most were surprised by the answer that a penny will grow that much over time. WHY?
- It's because of something called compound interest.
- Let me explain: you can INVEST money at banks and then earn INTEREST. A simple way to explain it is that your money helps you make more money over time.
- 24 hours a day, that money works for you making more money and building on each other without you doing anything.





- Explain to students: Because you gave the bank \$1,000 to keep, they give you \$50 as interest. In the second year, that 50 dollars is added to your total amount of money in the bank account. Because you've now given the bank \$1050 to keep safe, they will give you \$52.50 as interest. Then you have 1102.50 that the bank is protecting. The same process of the bank giving you money repeats over and over again as long as you keep money at their bank for a long period of time and the amount of money in your account keeps growing. Similar to the penny problem, the money added soon becomes enormous and, after ten years, your initial \$1,000 transforms into \$1628 without you ever doing a thing. See how the money grows faster and faster each year?
- Will not get into it today, but money can be invested at banks and other places in numerous ways (stocks, bonds, real estate) to generate more money..

- Show second slide above emphasizing the exponential curve.
  - Exponential Growth: Where money grows faster and faster over time.



• If you were surprised to learn the penny is worth more, it's because you did not understand compound interest. But, NOW you do! It is growing faster and faster (exponentially).







- If there's one thing I want you to remember from my visit today, it's to Save & Spend Less Money Than You Earn. It is the ONLY way you can save money.
- What's the point of saving? Choices!
  - o College? Job? Toy? Help others? Gives you freedom?
- Have money for emergencies, college, goals



## Closing/Exit:

• Challenge students to ask their parent(s) about their thoughts on saving, spending, and giving.

Note: Much of the STF curriculum is inspired by other curricula, specifically the Choose FI Foundation.