

MONEY MATTERS

Ages 4-7 (Level 1)

Description:	The learner will explore the concept of money as a medium of exchange and understand how it evolved over time, how money is used as a medium of exchange, and create their own money.	
Leading question:	Why do we value money?	
Age group:	6-7	
Subjects:	Economics, Math	
Total time required:	4 hours over 4 days	
Self-guided / Supervised activity:	High supervision	
Previous Learning	This project is most suitable for grade 1 and 2 students (ages 6-7)	
Resources required:	Paper, pens, color pencils (optional), household items such as	
	food, clothing, toys etc. for pretend shop activity	

Day	Time	Activity and Description			
1	10	In this project, we will understand what money is and how it works. The learner will			
1			•		
	minutes	reflect on these questions:	what is money? What does i	t help us do?	
		Learners will list 5 things yo	u can do with money (e.g., b	ouying things, paying for	
		school, donating money to	charity etc.) and the people i	involved when it happens.	
		Learners can use the table b		• • • • • • • • • • • • • • • • • • • •	
		Things you can do with	Person involved 1	Person involved 2 (or	
			Person involved 1	· ·	
		money	_	more)	
		Buying things	Buyer or customer	Shop keeper	
	30	From the list, the learner will observe that there is always an exchange happening			
	minutes	From the list, the learner will observe that there is always an exchange happening.			
		We trade money for something else using coin or paper currency or electronic			
		l	money (with bank cards). The learner will think: can you think of using anything else		
		to make these exchanges?	to make these exchanges?		
		Learners will interview their parents/family members or neighbours on what people			
		used to use to buy things long ago. They can use the following questions to collect			
		more information:	•		
		- Has money always	existed?		
			noney exist in the past?		
		iii wilat loiliis ala li	ioney exist in the past:		
	l .	I .			

		1			
		- What did բ	- What did people use to buy or get the things they need?		
		Responses given will include barter trade, cattle, cowrie shells etc.			
	15 minutes	Long before people started using paper bills, people were exchanging things with each other to meet their needs. For example, a shoemaker would exchange shoes with a farmer to get vegetables. This is called bartering or the barter system. The learner will play the following game with his or her family to understand the barter system: • Get at least 2 other players from your household or neighbors/friends • Imagine that every human has three needs – food, clothing, and entertainment or education.			
				he following table	
		Player	Item 1	Item 2	
		1			
		2			
		3			
	10 minutes	 Go around your house collecting 2-4 items (or more depending on the number of players) When the game starts, players will walk up to each other and exchange the items they have with each other. Make sure that you trade with all players. After each round, write in the table the items that you ended up with at the end of the round. You can also draw them instead of writing. The learner will reflect on the pros and cons of the barter system by answering the following questions in his or her notebook: Was it easy to convince others to trade their items for yours? Do you think life during the barter era was easy or hard? Give reasons for your answer. 			
2		Today, the learner will create his or her own currency!			
	10 minutes	The learner will think about five items he or she would buy if they had money and draw or list them.			
		The learner will no	w create his or h	er own paper mone	y:



		<u> </u>	
	30 minutes	 On a piece of paper, cut out at least 10 rectangular shapes for your paper bills. You can also cut out other fun shapes! Think about the currency denominations you will use – these are the numbers printed on paper money indicating their worth. What numbers have you seen on paper bills before? In Qatar, for example, the currency denominations used are 1, 5, 10, 50, 100, 200 and 500. On your rectangular cutouts, make at least 2 bills of some denominations, i.e., 2 ones, 2 fives, 2 tens etc. Design your currency by coloring it and drawing interesting things on it like important buildings in your country, the national animal etc. You can use actual paper money as an example. Get creative! Think of a catchy name for your currency! Examples of currency would include dollar, rupees, shillings etc. Feel free to create your own catchy 	
		name.	
		The learner will reflect:	
	5 minutes	 Can you purchase any of the items from your list using this money? You can ask your parents how much the items are worth Do you need more or less money? 	
	10-15 minutes	Learners present the paper bills made to their parents/family members and receive feedback and suggestions for improvement.	
	illillates	Learners make the edits and make the final paper money bills to be used throughout the project.	
	15	(Optional) The learner will try to earn money by helping her or his parents with housework:	
	minutes	 The learner can help with making beds, cleaning tables and floors, washing dishes etc. Parents can pay learners depending on the difficulty of the chore At the end of the day or week, the learner will calculate how much money she or he has made 	
		The learner will think about what items they can now afford with the	
		 amount of money they made! Parents can also use the paper money created by the learner instead of real 	
		money for this activity	
		Numeracy activity:	
		Numeracy activity:After creating your own currency and writing numbers on them, add the	
	numbers on the bills and find out the total amount of money you have		
	minutes	Arrange the paper bills in ascending and descending order	
3		Today, the learner will create her or his own coins and understand how coins and	
		paper bills are related!	

The learner will reflect on the types of coins she or he has seen and draw them, writing their value next to them. She or he can ask their parents for coins they have and visit a shopkeeper with a parent to see the different kinds of coins. An example has been done below:

Coin	Value
Euro cents	20 cents
Source: CC BY-SA	

At the grocery store or corner shop, the learner will ask the shopkeeper what she or he can buy with coins.

The learner will notice that coins have a very small value, and they can only be used to buy small or cheap items.

30 minutes

The learner will understand the relationship between coins and the paper bills:

- The learner will draw 10 round shapes (or other fun shapes) to make some coins
- The learner will make 2 coins of each denomination of any currency of his or her choice. The denominations of the Euro coins (called Euro cents), for example, are 1, 2, 5, 10, 20 and 50 cent, €1 and €2. Even 1 and 2 Euros are available only as coins. It takes 100 cents to make one Euro or €1 = 100 Euro cents
- Now, the learner will try to add to the coins she or he has drawn to get the
 value of one paper bill e.g., How many cent coins do you need to get one
 dollar, Euro or other currency? Younger learners can simply add or subtract
 the values of any coins of their choice.

4 Today, the learner will have a shopping party with his or her family!

The learner will create his or her own coins!

- First, the learner will decide on the denominations of their coins.
- Second, he or she will make at least 2 cutouts per denomination and write the values of the coins on each cutout
- Third, he or she will give the coins a creative name!

20 minutes

Now, the learner will agree with his or her family members on items they are willing to sell for the shopping party. The learner can even make his or her own items like birthday cards, cookies, juice etc. and sell them. Each household member will gather their items just like they did on day 1 during the barter trade activity, but this time, they will use the paper bills and coins created by the learner to "purchase" these items. Everyone must think of a price for their items before the start of the party.

If buyers do not have the exact amount needed to purchase the items and give learners more money than needed, ensure that learners subtract the price of the item from the amount issued to them and give the buyer back their change.

20 minutes

(Optional) Finally, the learner will think of how she or he can actually start a business to make money to buy some items like candy, stationery for school etc. when they are a little older:

- The learner can begin by asking their parents about the various ways people make money and make a list of all the options. These could include employment, business, talent-based careers e.g. singing, painting etc.
- The learner will reflect on their own interests e.g., singing, cooking, coloring
- They will then reflect on different opportunities based on their interests and hobbies like setting up a lemonade stand (if they like making juice), selling artwork (if they like painting), walking neighbors' dogs (if they like animals) etc.
- The learner will illustrate their business by drawing themselves doing these activities
- The learner will also think of their future aspiration and how they want to make money when they grow up and illustrate this through a creative drawing
- The learner will share all their drawings with their family and discuss what they would do with the money they earn from this business

20 minutes

Thinking through everything you have learnt over the past 4 days, learners take note of TWO of the following:

- What is the most important point you have learnt through this project?
- What are you finding challenging, puzzling or difficult to understand?
- What question would you most like to discuss further?
- What is something you found interesting?



		•
Asses	sment	- Critical thinking displayed in thinking about bartering vs money
Criter	ria:	- Creativity in the design of the currency notes and coins
		- Accuracy of pricing shop items
		- Accuracy in performing mathematical tasks, especially mental math
		- Critical thinking and creativity in enterprising/money making plan

Topics/Concepts Covered	 Forms of trading i.e., barter trade and trading with money Uses of money Denominations of currency Relationship between coins and paper money bills Addition and subtraction Critical thinking Creativity 		
	Presentation and communication skills		
Learning outcomes:	 Understanding of the differences between money-based exchange and bartering, and the advantages of the former over the latter Understanding of the uses of money Understanding the different denominations of currency Enhanced critical thinking and creativity skills Enhanced presentation and communication skills 		
Required previous learning:	Addition and subtraction within 100		
Inspiration:	n/a		
Additional enrichment activities:	The learner can practice subtraction using larger values of the paper and coin money		
Modifications for simplification:	The learner can skip the activities on coins and their denominations		

Ages 8 to 10 (Level 2)

Description:	The learner will explore the concept of money as a medium of exchange and understand how it has evolved over time, how money is used as a medium of exchange and create their own money. We will also learn about the concepts of demand and supply as well as consumers and producers.	
Leading question:	Why do we value money?	
Age group:	8-10	
Subjects:	Economics, mathematics	
Total time required:	5.5 hours over 5 days	
Self-guided / Supervised activity:	Medium supervision	



Resources required:	Pen, paper, scissors, color pencils (optional), ruler or solid item
	with straight edge, household items for pretend shop activity

D	T:	A stilling and Description		
Day	Time	Activity and Description		
1	10 minutes	In this project, we will explore one of the functions of money and understand how it works. The learner will reflect on these questions: what is money? What does it help us do? The learner will then list 5-6 things you can do with money (e.g., buying things, paying for school, donating etc.) and the people involved when it happens. Learners can use the table below:		
		Things you can do with money	Person involved 1	Person involved 2 (or more)
		Buying things	Buyer or customer	Shop keeper
	35 minutes	From the list, what do you notice about the things you can do with money? The learner will observe that there is always an exchange happening. We trade money for something else using coin or paper currency or electronic money (with cards). The learner will think: can you think of using anything else to make these exchanges? Learners interview their parents/family members or neighbours on what people used to use to buy things long ago. They can use the following questions to collect more information - Has money always existed? - In what forms did money exist in the past? - What did people use to buy/get the things they needed in the past?		
		Responses given will include barter trade, cattle, cowrie shells etc. Did you know that people always had a way of exchanging goods and services? We did not always have money as we know it today – we did not always use the same paper bills or any of the other means of exchange we now consider money. Long before people started using paper bills, people were exchanging things with each other to meet their needs. For example, a shoemaker would exchange shoes with a farmer to get vegetables. This is called bartering or the barter system. The learner will play the following game with his or her family to understand the barter system: Output Get at least 2 other players from your household or neighbors/friends Imagine that every human has three needs – food, clothing, and medicine. You can also create your own categories On a sheet of paper, draw the following table		

Player	Food	Clothing	Medicine	Total points
Round one				
1				
2				
3				

- Go around your house collecting 3-4 items (or more depending on the number of players). Make sure that the items you select have at least 2 that belong to the categories listed above and the rest are random items.
- Players will earn 2 points for food items, 1 for clothing and 0.5 for medicine. You can change this to your liking based on what you think is more important than the other.
- Players will come up with a system for exchange. For example, since food items are worth more, two items of clothing can be exchanged for one item of food, and four medicine items can be exchanged for 1 food item etc.
 Players can come up with their own exchange system
- When the game starts, players will walk up to each other to try and trade the
 items they have for better ones or for ones they are missing. Try to convince
 players to give up their items in exchange for yours. Make sure that you
 trade with all players.
- After each round, enter in the table the total points for the items from each category that you ended up with at the end of the round e.g., if you have 4 medicine items and you used the scoring system above, you will enter 4x0.5 = 2 under the medicine category.
- Play at least three rounds of this game. The goal is to get everything that you need based on the categories listed above

15-20 minutes

The learner will reflect on the pros and cons of the barter system by answering the following questions in his or her notebook:

- Was it easy to convince others to trade their items for yours?
- Do you think life during the barter era was easy or hard? What do you think happened to people who owned too much of one item? What about those who had items that were not considered important?

Literacy extension: Imagine you were a barber during the barter era. Write a short essay on how you ensured that your family's needs are met. What are some challenges you might face?

	1	<u> </u>		
	10 minutes	Learners will compare money-based exchanges to bartering. What are some things we can do with one that we cannot do with the other? Learners can ask an adult or parent for support to come up with the comparisons if needed.		
		Money usage	Bartering	
		e.g. We can use it to buy anything	We can only get what we need if someone wants what we have to offer	
	10 minutes	The learner presents the comparison between money usage and bartering to his or her family/parents for review and feedback. The family/parents will provide feedback and suggestions on how to improve them.		
		There is so much that money allows us to do. We can store our money for later use, we don't have to use it all up today because we don't have to worry that it will go bad or become unusable. Also, we can choose to spend only a part of our money to buy an item instead of giving up a huge item in exchange for a smaller one that we need. We cannot divide all items into smaller parts, but we can spend less money or more money to get the exact size and quantity of items we need.		
2		Today, we will learn about how money is used. Before we had paper bills, we used other items as money. Some examples: • Seashells • Weapons • Salt		
	5 minutes	The learner will think of other items that are valuable and can be used as currency and write a list of 3-4 items. For example, gold.		
	30 minutes	 Many things were used as money in the past. The learner will try to use an item as money at a local grocery store: Take any item you are willing to give up in exchange for an item from a grocery store Visit the store with an adult Ask the shopkeeper if you can trade the item for something in the store. If he or she rejects your offer, see if you can trade it for something that is worth less. For example, see if you can exchange an umbrella for some candy Record his or her response and use it to answer the following question: "why is it difficult to use items as currency?" 		

		 If you are unable to go to the grocery store, you can pretend that your classmates or family members are shopkeepers and role play the activity above.
	20	Isn't it interesting that we can work a lot better with paper or coin money than exchanging items, even though the items are more valuable than a piece of paper?
	minutes	 On a piece of paper, cut out 30 rectangles for your paper bills and 30 round shapes for your coins. If you are creating paper bills, think about the currency denominations you will use – these are the numbers printed on paper money indicating their worth. In Qatar, for example, the currency denominations used are 1, 5, 10, 50, 100, 200 and 500. On your rectangular cutouts, make 5 bills of each denomination, i.e., 5 ones, 5 fives, 5 tens etc. On the circular cutouts, the learner will make 2 coins of each denomination. You can create coins that are 1, 2, 5, 10, 20 and 50 cents. Design your currency by coloring it and drawing interesting things on it like important buildings in your country, the national animal etc. You can use actual paper money as an example. Get creative! Think of a catchy name for your currency! Some currency names are Riyal, Dollar, Yen, Pound, Dinar, Rupee etc. Feel free to either use an already existing name or to come up with your own name for your currency.
	minutes	 Calculate the perimeter of one of your rectangular paper bills by adding the length of all the sides of the bill. Use a ruler or your finger or any other straight-edged object to measure the length. You can give one joint of your finger a value like 2 and use that to calculate the perimeter if a ruler is not available. Using multiplication, show how many coins you will have if you make 5 rows each consisting of 23 coins (i.e., each row will have 23 coins and there are 5 rows in total) Calculate the radius and diameter of one of your coins. Start by folding the paper coin in half then draw a straight line where the fold line is, going from one edge of the circle to the other. This is the diameter. Half of this is the radius. What is the diameter and radius of your coin?
3		Today, the learner will explore the concept of demand.
	15 minutes	 The learner will set up a shop: Assemble a collection of items from your house and give each item a price according to what they are worth in real life. For example, candy can be worth \$3, a dress can be worth \$50, a book can be \$20 etc. If you are comfortable with decimals, use them in your prices

- Make sure that you have a selection of cheap and expensive items
- The learner can also create items to sell using materials available at home, or even make tea, juice or cookies/sandwiches to sell to their family members, neighbours and friends.

Learners will determine the price of the times by finding the cost of each ingredient that goes into making the item and adding a markup of 10-30% of the total cost in order to ensure that they make some profit. The final figure will be the price of the item. For example, if she or he chooses to sell cookies, the total cost will be the price of the flour, butter, sugar, eggs, baking powder, baking soda, and chocolate chips plus an extra 10-30% of the total cost as a markup so they can make a profit. See formula below:

 $Total\ cost = sum\ of\ all\ the\ costs\ of\ ingredients$

If we want profit of 30% of the costs, then Profit = 30% x total cost or $\frac{30}{100}$

 $Price\ of\ item = Total\ cost\ +\ Profit$

15 minutes The learner will invite his or her family to the shop and give them money to spend. The learner will give them the money created on day 2. The learner can give "customers" different amounts to see how they will spend it and inform them that they have to spend all of it.

Note: If you have more than one item of the same kind, display all of them and allow family members to take the item they buy. If you have only one item of the same kind, for example, only one dress, but many family members want it, allow them to buy it and take their money, but do not give it to anyone so that more people can buy it. Try to use items that you have plenty of such as fruits, candy, t-shirts, pens etc.

5 minutes

The learner will create the following demand table in her or his notebook:

Item	Price	Number of people who bought it
e.g., candy	\$3	4

10 minutes

Reflection – write your reflections on the following in your notebook:

• The number of people who bought an item (and those who want and can buy it but couldn't because there isn't enough of it) is called the **demand**.



		_	erve about your customers onship between demand a	demand for different item drice?	s?	
	15					
	minutes	_		ng a sale and reducing the pur customers' buying habits		
4		Today, the learner will und	derstand the concept of su	pply.		
	5 minutes	People buying things in a store are called consumers , and the people making the things sold in a store are producers . As a consumer, you are spending your money, but as a producer, you are making money from the items you produce and sell. Do you think a consumer wants prices to be high or low? Why?				
	5 minutes	Now think about a producer – would a producer want prices to be high or low? Why?				
	15 minutes	Assuming you are a producer, think about the following items: • A shoe that can get you \$60 if you sell it • A juice bottle that can get you \$2 Which item will you produce more of and why?				
		The learner will write in his or her notebook a paragraph about which item they will produce more of and why. He or she can even interview the shopkeeper to find out what they would rather sell more of.				
		Of course, you will choose to produce more of the item that will get you more money, in this case, the shoe.				
	20 minutes	Now, go back to your demand table and create the opposite – a supply table. The learner will think of the quantities a producer would sell of the same items and enter them in the table. Remember, as a producer, the higher the price, the more you want to sell of that item since it will make you more money			enter	
		Item	Price	How many units of this item I would sell as a		
				producer		
		e.g. candy	\$3	2		
		dress	\$50	5		



	1					
5		Today the learner w	ill understand the c	oncept of a budget.		
	5 minutes	Ask the parent or family member who is working or used to work how they decided to spend the money they earned. It is important to also save and budget with money. A budget helps us understand how to organize our money so that we are spending it in the best way possible for us, and maybe even saving some.				
	20 minutes	The learner will create a monthly supply of essentials to understand how budge work:				ets
		important t not sure of • Give each o see in a sto	o you. You can cons the most important f these items a price re. You may ask mer	essential goods at he e that reflects their mbers of your house	family members if yo nome. real value that you w shold or any adult if y	ould ou
		 are not sure, or even check for yourself at a nearby store or on the packagi the item came in Next, take some money from your currency notes, say \$100. This is your budget (total amount of money available to spend) for the month Add the cost of all the items you gathered or listed Subtract the total cost of items from the budget. Do you have more or less money than the total cost of the items you need? 				r
	10 minutes	Repeat this with a higher budget of \$200. What difference do you notice? Are you able to save anything or do you want to purchase more items? Money saved is the amount that you have left over after you pay for everything that you need. One can save the money that is left after the purchase of all the important essential goods in a secure place such as with your parents, a piggy bank or bank account for future use. Write your observations in your notebook.				
	30 minutes	 Let's understand through a simple example how a budget is broken down: Your budget is made up of the cost of each item you purchase. Let's imagine that you plan to purchase only 2 items, apples and bananas. Can you write this as an equation? It would look something like: apples + bananas = total budget Now let's imagine that you have a budget of \$50 and that the price of one banana is 5, while that of an apple is 2 How many bananas and apples can you buy with \$50? Try different combinations to find the right answer. You can recreate the table below 				rite otal one
		Item Apple	Price \$2	Quantity 1	Total 2 x 1 = 2	
		Banana	\$5	10	5 x 10 = 50	



			To	otal		2+ 50 = 52	
		In the example in the table above, the total is \$52, which is over the budget we have set. Change the quantities and see if you can get exactly \$50!					
	20		r will help his or h sing the template		t together a weekly	or monthly budg	et of all
	minutes		Weekly budget			7	
		Item		Price	Quantity	Total	
Assass	20 minutes sment	Thinking through everything you have learnt over the past 4 days, learners take not of TWO of the following: • What is the most important point you have learnt through this project? • What are you finding challenging, puzzling or difficult to understand? • What question would you most like to discuss further? • What is something you found interesting?					t?
Criter				_	out bartering vs mo	Siley	
Criter		- Creativity in the design of the currency notes - Accuracy of pricing shop items based on realistic prices					
			Accuracy in performing mathematical tasks, especially mental math				
			thinking in weekly budget design				
			r				
Topics	s/concepts	covered	· ·		of exchange		
			•	•	d its evolution , barter trade and ti	rading with mono	v
			- Uses of	_	, parter trade and ti	rading with mone	У
				•	ırrencv		
			Denominations of currencySupply and demand				
			- Producers and consumers				

Budgeting

Addition and subtraction Critical thinking skills Creativity skills



	Describation and service stick skills				
1	Presentation and communication skills				
Learning outcomes:	 Understanding of the differences between money and bartering, and the advantages of the former over the latter 				
	- Understanding of supply and demand				
	 Understanding of supply and demand Understanding the concepts of producers and consumers in a 				
	market and their competing interests				
	, —				
	- Understanding of a budget				
	- History of money and it's evolution				
	- Enhance learners critical thinking and creativity skills				
But to day to a	- Enhance learners presentation and communication skills				
Required previous	Multiplication within 10				
learning:					
Inspiration:	n/a				
Additional enrichment activities:	 The learner can conduct pricing and other calculations using decimals Older learners can plot their demand and supply curves on a 				
activities.	coordinate plane:				
	Create the following graph in your notebook and plot				
	coordinates according to your demand table				
	coordinates according to your demand table				
	Quantity Price \$15				
	quartery 111cc				
	Demanded 12				
	Price Month				
	9 9				
	\$15 1				
	12 2 6				
	9 3				
	6 5				
	3 7				
	0 1 2 3 4 5 6 7				
	Quantity				
	Source:				
	http://www2.harpercollege.edu/mhealy/eco212i/lectures/s&d/s&d.htm				
	 The horizontal line – called the x-axis – will show the number of 				
	times family members bought the same item. This is the				
	quantity of demand.				
	 The vertical line – the y-axis – represents the price of each item 				
	 Example: in the example above, the table shows that the item 				
	priced at \$15 was purchased one time, while the item priced at				
	\$12 was purchased two times. On the adjacent plot, this is				
	shown by the top two points on the plot (1,15) and (2,12)				
	• The first number in (2, 12), which is 2, is the number on the				
	x-axis, while the second number, 12, is the number on the y-axis.				
	So, to plot this, you will construct a similar plot then place your				
	i co, to place that, you will constitute a similar place your				



	 finger on number 2 on the x-axis. Keeping your finger locked in this position without moving left or right, you will go up to the corresponding number on the y-axis, 12. (2,12) and (1,15) are called ordered pairs Construct the same graph in your notebook and plot your own demand table based on your family's demand for the items you sold them earlier Finally, draw a line passing through all the points in your graph.
	 Finally, draw a line passing through all the points in your graph. This is called the demand curve
Modifications for simplification:	The learner can skip the supply and demand activity



Ages 11 to 14 (Level 3)

Description:	The learner will explore the concept of money as a medium of exchange and understand how it evolved over time, how money is used as a medium of exchange and create their own money. We will also learn about the concepts of demand and supply as well as consumers and producers.	
Leading question:	Why do we value money?	
Age group:	11-14	
Subjects:	Economics, mathematics	
Total time required:	6.3 hours over 5 days	
Self-guided / Supervised activity:	Low supervision	
Resources required:	Pen, paper, scissors, color pencils (optional), ruler or solid item with straight edge, household items for pretend shop activity	

Day	Time	Activity and Description			
1	10 minutes	In this project, we will explore some of the functions of money and understand how it works. The learner will reflect on these questions: what is money? What does it help us do? The learner will then list 5-10 things you can do with money (e.g., buying things, paying for school, donating etc.) and the people involved when it happens. Learners can use the table below:			
		Things you can do with money	Person involved 1	Person involved 2 (or more)	
		Buying things	Buyer or customer	Shopkeeper	
	30 minutes	something else using coin of learner will think: can you to Learners interview their patused to use to buy things lot more information - Has money always - In what forms did no	ere is always an exchange or paper currency or electre think of using anything else trents/family members or rong ago. They can use the few existed? The past to buy/get the few in the few in the past to buy/get the few in the few in the past to buy/get the few in	happening. We trade money for conic money (with cards). The e to make these exchanges? neighbours on what people following questions to collect ne things they need?	

Long before people started using paper bills, people were exchanging things with each other to meet their needs. For example, a shoemaker would exchange shoes with a farmer to get vegetables. This is called bartering or the barter system. The learner will play the following game with his or her family to understand the barter system:

- Get at least 2 other players from your household or neighbors/friends
- Imagine that every human has three needs food, clothing, and medicine. You can also create your own categories
- On a sheet of paper, draw the following table

Player	Food	Clothing	Medicine	Total points		
	Round one					
1						
2						
3						

- Go around your house collecting 3-4 items (or more depending on the number of players). Make sure that the items you select have at least 2 that belong to the categories listed above and the rest are random items.
- Players will earn 2 points for food items, 1 for clothing and 0.5 for medicine.
 You can change this to your liking based on what you think is more important
 than the other. This will also help you come up with a system for exchange.
 For example, since food items are worth more, two items of clothing can be
 exchanged for one item of food, and four medicine items can be exchanged
 for 1 food item etc. Players can come up with their own exchange system
 based on the scoring system created.
- When the game starts, players will walk up to each other to try and trade the
 items they have for better ones or for ones they are missing. Try to convince
 players to give up their items in exchange for yours. Make sure that you
 trade with all players.
- After each round, enter in the table the total points for the items from each category that you ended up with at the end of the round e.g., if you have 4 medicine items and you used the scoring system above, you will enter 4x0.5 = 2 under the medicine category.
- Play at least three rounds of this game. The goal is to get everything that you need based on the categories listed above

15 minutes The learner will reflect on the pros and cons of the barter system by answering the following questions in his or her notebook:

• Was it easy to convince others to trade their items for yours?

	10 minutes	happened to people who owned who had items that were not continuous continuous that were not continuous that your facture of the continuous continuous that your facture of the continuous that you might facture of the continuous that you want to the continuous that you want	barber during the barter era. Write a short mily's needs are met. What are some bartering, what are some things we can dother? Learners can ask an adult or parent in	
		Money	Bartering	
		e.g. We can use it to buy anything	We can only get what we need if someone wants what we have to offer	
	The learner presents the comparison between money usage and bartering her family/parents for review and discussion There is so much that money allows us to do. We can store our money for we don't have to use it all up today because we don't have to worry that it bad or become unusable. Also, we can choose to spend only a part of our buy an item instead of giving up a huge item in exchange for a smaller one			
			ller parts, but we can spend less money or	
2	more money to get the exact size and quantity of items we need. Today, we will learn about how money is used. Before we had paper bills, we other items as money. Some examples: Seashells Weapons Salt			
	5 minutes	The learner will think of other items the and write a list of 3-4 items. For examp	at are valuable and can be used as currency le, gold.	
	30 minutes	money at a local grocery store:	e past. The learner will try to use an item as o give up in exchange for an item from a	

	20 minutes	 Ask the shopkeeper if you can trade the item for something in the store. If he or she rejects your offer, see if you can trade it for something that is worth less. For example, see if you can exchange an umbrella for some candy Record his or her response and use it to answer the following question: "why is it difficult to use items as currency?" If you are unable to go to the grocery store, you can pretend that your classmates or family members are shopkeepers and role play the activity above. Isn't it interesting that we can work a lot better with paper or coin money than exchanging items, even though the items are more valuable than a piece of paper? The learner will now create his or her own paper and/or coin money: On a piece of paper, cut out 30 rectangles for your paper bills and/or 30 round shapes for your coins. If you are creating paper bills, think about the currency denominations you will use – these are the numbers printed on paper money indicating their worth. In Qatar, for example, the currency denominations used are 1, 5, 10, 50, 100, 200 and 500. On your rectangular cutouts, make 5 bills of each denomination, i.e., 5 ones, 5 fives, 5 tens etc. On the circular cutouts, the learner will make 2 coins of each denomination. You can create coins that are 1, 2, 5, 10, 20 and 50 cents etc. Design your currency by coloring it and drawing interesting things on it like important buildings in your country, the national animal etc. You can use actual paper money as an example. Get creative! Think of a catchy name for your currency! Some currency names are Riyal, Dollar, Yen, Pound, Dinar, Rupee etc. Feel free to either use an already existing name or to come up with your own name for your currency. Numeracy activity: Calculate the area of one of y
		$\pi = 3.14$)
3	15 minutes	Today, the learner will explore the concept of demand. The learner will set up a shop: • Assemble a collection of items from your house and give each item a price according to what they are worth in real life. For example, candy can be worth \$3, a dress can be worth \$50, a book can be \$20 etc. • If you are comfortable with decimals, use them

- Make sure that you have a selection of cheap and expensive items
- The Learner can also create items to sell using materials available at home, or even make juice or cookies/sandwiches to sell to their family members.

In that case, learners will determine the price of the times by finding the cost of each ingredient that goes into making the item and adding a markup of 10-30% of the total cost in order to ensure that they make some profit. For example, if she or he chooses to sell cookies, the total cost will be the price of the flour, butter, sugar, eggs, baking powder, baking soda, and chocolate chips and they compute the profit as 10-30% of the total cost depending on how much profit they want to make. See formula below:

Total cost = sum of all the costs of ingredients

If we want profit of 30% of the costs, then Profit = 30% x total cost or $\frac{30}{100}$

Price = Total cost + Profit

15 minutes The learner will invite his or her family to the shop and give them money from the money created on day 2 to spend. The learner can give "customers" different amounts to see how they will spend it and inform them that they have to spend all of it.

Note: If you have more than one item of the same kind, display all of them and allow family members to take the item they buy. If you have only one item of the same kind, for example, only one dress, but many family members want it, allow them to buy it and take their money, but do not give it to anyone. In real life, you should always receive the item you paid for, but we do not have an unlimited amount of the items we are using in this activity. You can pretend to give the item to the customers so more people can buy it, or put a piece of paper as a placeholder for the item to indicate that people can still purchase it from your store. Try to use items of which you have a larger amount such as fruits, candy, t-shirts, pens etc.

5 minutes

The learner will create the following demand table in her or his notebook:

10 minutes

Item	Price	Number of people who wanted to buy it	Number of people who bought it
e.g. candy	\$3		4

Reflection – write your reflections on the following in your notebook:

- The number of people who bought an item (and those who want and can buy it but couldn't because it ran out) is called the **demand**.
- What do you observe about your customers' demand for different items?
- Is there any relationship between demand and price?

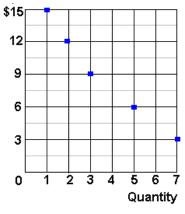
10 minutes

The learner will try the activity again after announcing a sale and reducing the price of some or all items. What do you observe about your customers' buying habits now?

Create the following graph in your notebook and plot coordinates according to your own demand table from the previous activity

	Quantity Demanded
	per
Price	Month
\$15	1
12	2
9	3
6	5
3	7





Source:

http://www2.harpercollege.edu/mhealy/eco212i/lectures/s&d/s&d.htm

- The horizontal line called the x-axis will show the number of times family members bought the same item. This is the quantity of demand.
- The vertical line the y-axis represents the price of each item
- Example: in the example above, the table shows that the item priced at \$15 was purchased one time, while the item priced at \$12 was purchased two times. On the adjacent plot, this is shown by the top two points on the plot (1,15) and (2,12)
- The first number in (2, 12), which is 2, is the number on the x-axis, while the second number, 12, is the number on the y-axis. So, to plot this, you will construct a similar plot then place your finger on number 2 on the x-axis. Keeping your finger locked in this position without moving left or right, you will go up to the corresponding number on the y-axis, 12.
- 10 minutes
- (2,12) and (1,15) are called ordered pairs
- Construct the same graph in your notebook and plot your own demand table based on your family's demand for the items you sold them earlier
- Finally, draw a line passing through all the points in your graph. This is called the demand curve



		The learner presents the of family/parents for review	demand table and demand and discussion.	I graph to his or her
4		Today, the learner will understand the concept of supply.		
	5 minutes	People paying for items in a store are called consumers and the people making the items sold in a store are producers . As a consumer, you are spending your money, but as a producer, you are making money from the items you produce. Do you think a consumer wants prices to be high or low? Why?		
	5 minutes	Now think about a producer – would a producer want prices to be high or low? Why?		
	15 minutes	Assuming you are a producer, think about the following items: • A shoe that can get you \$60 if you sell it • A juice bottle that can get you \$2 Which item will you sell more of and why? The learner will write in his or her notebook a paragraph about which item they will		
		produce more of and why. He or she can even interview the shopkeeper to find out what they would rather sell more of. Of course, you will choose to produce more of the item that will get you more money, in this case the shoe.		
	20 minutes	Now, go back to your demand table and create the opposite – a supply table. The learner will think of the quantities a producer would sell of the same items and enter them in the table. Remember, as a producer, the higher the price, the more you want to sell of that item		
		Item	Price	How many units of this item I would sell as a producer
		e.g. candy	\$3	2
		Dress	\$50	5
	15 minutes	The learner will then plot created yesterday using p		the demand graph he or she as y-axis.

	15 minutes	 The learner will reflect on some of the factors that affect supply and demand, and list them in his or her notebook. Prompts: What do you think makes people want an item less or more? In other words, what affects demand? Think of an example from your own life where you stopped buying an item, or suddenly bought more of an item. What made you do this? Some reasons include change in taste or preference, price change. Can you think of more? In contrast, if you decide to start selling an item, for example, homemade ice cream, what are some reasons you might start selling more or less? For example, if it becomes too expensive for you to buy milk because all the cows in your area are sick, then you might make less ice cream. Can you think of other reasons? 	
	10 minutes	The learner presents the supply table and supply graph to his or her family/parents for review and discussion.	
5		Today the learner will understand the concept of a budget.	
	5 minutes	Ask your parent or family member who is working or used to work how they decided to spend the money they earned. Another cool thing that money allows us to do is to save and budget. A budget helps us understand how to organize our money so that we are spending it in the best way possible for us, and maybe even saving some.	
	20	The learner will create a monthly supply of essentials to understand how budgets work:	
	minutes	 Make a list of the 10 most important essential goods at home that are important to you. You may ask members of your parents or any adult in your household if you are not sure of the 10 most important essential goods at your home. Give each of these items a price that reflects their real value that you would see in a store. You may ask members of your household or any adult if you are not sure, or even check for yourself at a nearby store or on the packaging the item came in Next, take some money from your currency notes, say \$100. This is your budget or the total amount available to you to spend for the month Add the cost of all the items you gathered or listed Subtract the total cost of all the items listed from the budget. Do you have more or less money than the total cost of the items you need? 	
	10 minutes	Repeat this with a higher budget of \$2000. What difference do you notice? Are you able to save anything or do you want to purchase more items? Money saved is the amount of money that is left over after you pay for everything that you need. One can save the money that is left over after they have paid for everything they need in a secure place like with your parents, a piggy bank or in a bank account. Write your observations in your notebook.	

Let's understand through a simple example how a budget is broken down:

- Your budget is made up of the cost of each item you purchase. Let's imagine that you spend your entire budget on only 2 items, apples and bananas. Can you write this as an equation? It would look something like: apples + bananas = budget
- Now let's imagine that you have a budget of \$50 and that the price of one banana is 5, while that of an apple is 2
- How many bananas and apples can you buy with \$50?
- Try different combinations to find the right answer. You can recreate the table below

Item	Price	Quantity	Total
Apple	\$2	1	2 x 1 = 2
Banana	\$5	10	5 x 10 = 50
Total			2+ 50 = 52

In the example in the table above, the total is \$52, which is over the budget we have set. Change the quantities and see if you can get exactly \$50!

10 minutes

Optional/advanced: Can you represent the budget in the example using the equation below?

- Total Budget = (price of item 1 x quantity of item 1) + (price of item 2 x quantity of item 2)
- Another way to write is would be p(x) + p(y) = 50, where p = price, x = quantity of item 1, <math>y = quantity of item 2
- Substitute the symbols in the equation above for the actual numbers from our example and see if the equation is correct, i.e., if p(x) + p(y) is actually equal to 50.

20 minutes

The learner will help his or her family put together a weekly or monthly budget of all expenses. To do this, the learner will ask his parents for all the expenses they incur on a weekly or monthly basis using the template below:

	Weekly or monthly budget		
Item	Price	Quantity	Total

10 minutes

The learner presents the prepared budget to his or her family/parents for review and feedback. The family/parents will provide feedback and suggestions on how to improve the budget.



	20 minutes	Thinking through everything you have learnt over the past 4 days, learners take note of TWO of the following: • What is the most important point you have learnt through this project? • What are you finding challenging, puzzling or difficult to understand? • What question would you most like to discuss further? • What is something you found interesting?
Criteria: - - - -		 Critical thinking displayed in thinking about bartering vs money Creativity in the design of the currency notes Accuracy of pricing shop items Accuracy in performing mathematical tasks, especially mental math Critical thinking in reflecting on factors affecting demand and supply Critical thinking in weekly budget design

Topics/concepts covered	- Money as a medium of exchange
	- History of money and its evolution
	 Forms of trading i.e., barter trade and trading with money
	- Uses of money
	- Denominations of currency
	- Supply and demand
	- Producers and consumers
	- Budgeting
	- Addition and subtraction
	- Critical thinking skills
	- Creativity skills
	Presentation and communication skills
Learning outcomes:	 Understanding of the history of money and its evolution Understanding of the differences between money trading and bartering, and the advantages of the former over the latter Understanding of supply and demand Understanding the concepts of producers and consumers in a market and their competing interests Understanding of the uses of money and budgeting Enhancing learners' critical thinking and creativity skills Enhancing learners' presentation and communication skills
Required previous learning:	Multiplication and division within 100
Inspiration:	n/a
Additional enrichment activities:	
Additional enficiment activities:	- The learner can conduct pricing and other calculations using decimals
	uecimais



	- The learner can explore different price scenarios and their implications on the budget — what happens to your budget when prices of one good rise or fall?
Modifications for simplification:	The learner can skip the supply and demand activity