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Introducing Financial Literacy at the Elementary Level

Shelby Gertz

California State University, Monterey Bay

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Introducing Financial Literacy at the Elementary Level

Shelby Gertz

California State University Monterey Bay

Abstract

This project aims to prepare our youth to be successful in the global economy by addressing the issue of financial literacy. Findings reveal that there is no consistent source from where our elementary aged children receive their financial knowledge. In response, this project implements four lesson plans in a third grade classroom with the goal to find out if third graders are capable to grasp different financial topics. The efforts were a success; the class was able to understand most of the financial literacy concepts and they seemed very interested in money-management skills and pretending to be entrepreneurs.

Literature Review

Introducing the topic of financial literacy earlier on in our students' lives is necessary. According to Clarke (2005), America is very focused on teaching our future generations how to make money, while barely teaching them how to properly manage it. She stresses that this is important because economic freedom can only be reached through becoming financially literate (2005). America has a complicated financial market, so it is vital for young workers to be financially literate in order to be successful (Curto, Lusardi & Mitchell, 2010). When financial turbulence occurs, citizens must be educated in order to make important decisions that will affect them financially in the future (Becchetti, Caiazza & Coviello, 2013). Some argue that young children would not understand the concept of saving money or other aspects of financial education (Otto, Schots, Webley & Westerman, 2006). However, it would be most beneficial to start providing our students with financial education before they start making their own financial decisions (Curto, Lusardi & Mitchell 2010).

Having the ability to purchase property is an important theme in a person's life (Gelman & Noles, 2014). In order to purchase property, one must be capable of saving their money. According to Bernheim, Garrett, & Maki (1997), there is evidence that the more exposure youth have to financial education, the more likely that person will be able to save money in their adult lives (1997). This evidence has proven to financial institutions the importance of educating the young consumer (Furnham, 1999). The problem is that not all young consumers have access to financial education. Curto, Lusardi & Mitchell (2010), came to the conclusion that the only consistent place where children gain financial knowledge is through their parents (2010). It is not

surprising that children whose parents have higher incomes have more positive financial behaviors and attitudes (Jorgenson & Savla, 2010). This makes sense because children whose parents have more income are able to provide their children with more experiences with practicing using money (Magruder & Marshall, 1960). On the other hand, children whose parents are not financially sophisticated and lack a college degree are far less likely to be able to provide their children with sufficient financial experiences (Curto, Lusardi, & Mitchell, 2010).

Taran Barca-Hall, my community expert, noticed that there is a trend occurring where adults are not trusting our financial institutions. These adults do not have bank accounts and just deal with cashing their paychecks and saving paper money. This is not a good financial habit for us to be teaching our future generations (2016). According to Clarke (2005), parents do not want kids to be aware if they are undergoing financial struggles. This usually makes it so that parents completely avoid talking to their children about financial literacy issues (2005). Another reason parents avoid teaching their children about financial education is because they feel as though they are unable to properly manage their own money themselves (Batty, Collins, & Odders-White, 2014).

The problem with children not learning how to make good financial decisions is that financial illiteracy can potentially last a lifetime (Curto, Lusardi, & Mitchell, 2010). If people never learn how to make beneficial financial decisions then they will most likely not have the tools to live a comfortable and productive life.

Project Description

I was inspired to do this project because although I am a Liberal Studies major, for the past seven years I have worked in an accounting office as a bookkeeper. Throughout my

experiences in the business world I have come across many adults who don't know how to properly manage their finances. Since one must be financially literate in order to be successful and productive in our current society, I thought teaching simple financial literacy topics to elementary schoolers would really be beneficial to their futures.

In order to teach elementary schoolers financial literacy, I teamed up with the Monterey Bay Junior Achievement Program. Their mission is to teach young people how to succeed in the global economy through topics like work readiness, financial literacy, and entrepreneurship. Junior Achievement was glad to assist me complete my project by providing me with the proper training and placing me in a local elementary school. I was placed in Prunedale elementary which is a mostly hispanic lower socio-economic school. At Prunedale elementary, I took over a third grade class for the day and introduced them to some basic financial literacy topics through four different lesson plans. These lesson plans aim to teach children on the importance of money to a city, why people pay taxes, different forms of payment, financial institutions, and money management strategies.

The first lesson plan aimed to have students understand that there are different zones in a city as well as the different kinds of goods and services that are provided by businesses. I began by explaining to students that a city is an important place of business, where people live, work, and play; and a city planner decides which places go where in a city. I also explained to them that cities are organized into different zones. I hung up the city zone floor map (Appendix B), then discussed how the different color zones on the map represent the different types of city zones, which include the multipurpose zones, residential zones, agricultural zones, business zones, and industrial zones. Once the students were familiar with the zones, I passed out the

Junior Journal (Appendix C), which they used to practice being a city planner. The students then used a ruler and a pencil to draw a square in the open area in order to create their own multipurpose city zone. After they drew the outline of their multipurpose zone, they then colored it purple (to match the floor map key) and used their ruler to measure and record how tall and wide their zone was.

After the students completed their Junior Journal worksheet, I explained to them that cities need a variety of businesses to keep them running. Businesses provide jobs, goods, and services for people in a city. Goods are items that are bought or sold to satisfy a need or want. People who do work for you are providing services. Then I passed out pop-up buildings to each student (Appendix D); all the buildings represented different kinds of businesses. The students then created a name for their building and colored it how they pleased. Once they were done coloring, they popped up their buildings in order to make them 3D and allow them to stand on their own. Once all the students were done assembling their buildings in the upright position, they each came up to the floor map and placed their buildings in the correct city zones.

The second lesson plan aimed to show students the importance of money to a city and different methods people use to pay for goods and services. First I explained to the students that city governments need money since they are run like businesses and they collect money through taxes. Most people in a city are required to pay taxes. Sales tax is one kind of tax and nearly everyone pays sales tax. Sales tax is the extra amount of money added to the cost of a good or service and paid by the buyer. I then asked the class if anyone had ever been to a city zoo or an animal park and immediately most of the students' arms shot up in the air. I passed out pretend city zoo gift cards (Appendix E) to all of the students. I explained to the students that they were

to practice paying sales tax on different items that could be found in a city zoo gift shop. The chart on the gift card showed that the bug notebook cost \$1.00, the sales tax charged at the gift shop is 5%, so that means every dollar spent you will need to pay an additional 5 cents. This means that the bug notebook all together would be \$1.05. I then gave the students a few minutes to fill out the rest of their gift card.

Once the gift card activity was done I hung up the payment method poster (Appendix F). I then told the students that income is money earned for work and people use their income to buy things that they need and want. A need is something you cannot live without while a want is something you would like to have but can live without. People in a city pay for needs and wants in different ways, these ways include cash, checks, debit cards, credit cards, and electronic payment. I had five volunteers come to the front of the class and gave them each a payment card (Appendix G), each payment card had a picture of each payment method and on the back a description of how that method worked. The students each took turns reading to the class the back of the particular payment method card they had, and then they taped it to the appropriate section on the payment method poster (Appendix F).

The goal of the third lesson plan was to have students understand the contributions of financial institutions to a city and how financial institutions help people achieve their economic goals. I explained to the students that banks and credit unions are businesses where people and other businesses save, borrow, and exchange money. Businesses and people in a city often put their money in a bank or credit union to keep it safe and to earn money. I then explained to the students what deposits, interest, withdrawals, savings accounts, and savings are.

After providing the students with background info, they were then organized into groups of four. Each group was given a piggy bank savings board game (Appendix H), a set of That's Life cards (Appendix I), a die, four different colored game pieces, and each student received an account register (Appendix J). I explained to the students that there are three types of spaces on the board: a deposit was when players earn or received money and deposit it into their accounts, a withdraw was when players spend money and must make a withdrawal from their accounts, and a That's Life space was when a player draws a that's life card from the stack of cards provided. On your account register sheet you will fill in your withdrawal and deposits along with the date. To start the game each player selects their game piece and then rolls the die, whoever gets the highest number goes first. The first player rolls the die and moves their piece clockwise and then records their transaction on their check register. Since everyone here is really good at saving money, you will make a savings deposit into your piggy bank of \$50 every time you pass start. Also, notice that everyone starts out with \$250 in your accounts. The goal of this game is to have the most money in your bank account at the end of play. I gave the children 30 minutes to play the piggy bank savings game.

The goal of the final lesson was to have the students understand the role of an entrepreneur by exploring the process involved in opening a restaurant. I explained to the students that a consumer is a person who uses or buys goods and services while a producer is a person who makes goods and an entrepreneur is someone who starts a business. The class had stayed seated with their groups from lesson three, and I passed out each student a ReciPs Business Plan (Appendix K). I told the students that within their groups they would need to choose a manager and an accountant. The restaurant manager was to keep track of money while

the accountant was to pay the bills. Once the groups chose their managers and accountants, I handed out each accountant a payment sheet (Appendix L) and passed out each restaurant manager \$200 of play money in order to start their businesses. I told the class that even though they had \$200 now, they will need \$300 in order to open a successful restaurant. I let them know that their group could earn more money if during the activity they work well as a group, participate in class discussion, as well as answer questions. To begin the activity the students were to complete their ReciPs Business Plan (Appendix K) which asked questions like where is the best place for your restaurant? What type of food will you serve? How much will you charge per meal? And who will you hire first? I gave the students about 20 minutes to brainstorm and fill out their business plan. As they were working together on the worksheet I walked around the class and gave groups who were working well together more money.

After the groups were done filling out their business plans I gave them another opportunity to earn more money by asking them some questions about some terms they had been introduced to earlier. If the students provided a correct or thoughtful answer, they earned their group more money. The questions included: Who can tell me what a consumer is? Who can tell me what a producer is? Who remembers what an entrepreneur is? In which city zones could we find restaurants? After these questions were asked each restaurant manager counted the amount of money their group had earned throughout the activity. I explained to each group that their cash was going to have to be deposited into their bank account to pay the rent for their restaurant since they do not own the building. Rent is \$100 so the restaurant managers handed the accountants \$100 and the accountants were to fill out their deposit slip on the payment sheet (Appendix L). Once the accountants filled out their deposit slip and attached the money, they were to give their

deposits to me. Next, I told the students that in order to have electricity and water for the restaurant they would need to pay their utility bill which is \$40. I asked the students to please have the restaurant managers hand \$40 to their accountants and then if the accountants could please fill out the check payable to the City Utility company on the payment sheet. Once the accountants filled out their checks they were to hand the checks to their teacher. Lastly, I explained to the students that now they have paid rent and utilities they would have to buy food, cookware, and place settings. If the groups had an additional \$100 they would be able to purchase these supplies by bringing me their \$100 in cash. I then told the class after completing all these steps they would be able to open up their restaurants!

At the end of the class I took some time to have a graduation ceremony. Each student received a certificate of accomplishment, as well as a magnet for them to take home. The magnet had a design of different city zones on the front and then on the back it explained what we had done in class today. I told the students that when they get home they should show the magnet to their parents so they can apply it to their fridge. I am hoping that by sending the students home with this magnet it will spark a conversation between the students and their parents about financial literacy which can lead to dual-generational learning.

Results

I would consider my project a success. Once I met with Taran, everything pretty much fell into place. He helped me become a Junior Achievement volunteer which provided me with training and material. He also helped coordinate me being able to go to Prunedale Elementary school to teach for the day. Everything leading up to the project went very smoothly, it was a lot

of preparing for one big day of executing. While teaching the class, everything seemed to go pretty well. However, some of the topics seemed to go over the students' heads. They were in third grade, so it was understandable when they all didn't quite catch on to topics like calculating sales tax and how credit cards work.

Even though not every student fully grasped every concept, I feel like my efforts did address the problem. The lesson plans that I implemented introduced topics to third graders that they had never been exposed to or thought about before. They were intrigued when playing the piggy bank savings game, and they became interested and excited when creating their restaurant business plans! If I were to do this again in the future I would try and stretch it out over a longer time period. I felt that it was a lot of information for the students to take in in one day. It would be better if there was one lesson taught a day or per week, that way the students have time to absorb the information a little better.

In the future, I should find out what the teacher's preferred teaching style is. I have a very relaxed style of teaching and the teacher was present while I was there teaching the class; sometimes she seemed very unhappy with how I was conducting the lessons and slightly unappreciative. I am not sure if it was because she didn't have faith in my teaching ability or if she just has a very strict teaching method. Either way, she had interrupted me a few times and was yelling at me as if I were one of her students. I just let it go in one ear and out the other, figured maybe she was having a bad day. Definitely used it as a learning experience, in case I work in another teacher's classroom in the future, I now know I need to find out from the teacher as to how she prefer her class run. While executing the project I learned that third graders have very different levels of financial literacy knowledge. This is because financial literacy is not

being taught in schools early enough. Children are never too young to be exposed to different age-appropriate financial literacy topics and it is only preparing them for their futures.

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Appendix A

Community Expert Interview

Interviewer: Shelby Gertz

Interviewee: Taran Barca-Hall

Interview Setting: February 25th, 11AM, at the University Center Lounge Area

Affiliation with Interviewee: Central Coast Regional Director for Junior Achievement

(start of interview)

Interviewer: Hey Taran, how's your day going so far?

Interviewee: It is going well, cannot complain with weather like this. Sorry for being a little late.

[Looks at watch]

Interviewer: Oh yea I know, the weather has been gorgeous lately...Anyways, as you know we met here today to discuss the issue of financial literacy. I am worried that elementary children are not getting the proper exposure to financial education. This made me wonder if elementary school is too early to start teaching children about economics and financial literacy. In your opinion, how early is too early to begin introducing these ideas to children? Or, is there such thing as too early?

Interviewee: Oh! no, I do not believe there is such thing as too early. I have two children, one is one year old and the other is three. I have already opened up college funds for them as well as savings accounts...When they get older I plan on giving them chores and allowances.

Interviewer: Okay, yea, that is a good way to start introducing the idea of financial responsibility early on to your children...How would you introduce the topic in the classroom?

Interviewee: For children in early elementary school, Junior Achievement introduces the idea of needs vs. wants. Children learn money management skills by understanding that it is necessary to purchase items that you need before buying items that you just want.

Interviewer: That is a really simple way to introduce responsible spending! Is Junior Achievement able to reach out to all children in public schools? Or just certain schools?

Interviewee: Unfortunately, we are only able to expose the children in high need schools to our program. I would love to be involved in more schools, but we only have so many volunteers.

Interviewer: Since the program focuses on “high need” schools, does that mean that children coming from an upper class family and community likely have more financial knowledge than a child coming from a lower class family and community? Some children may have more opportunities to use money than others?

Interviewee: Not necessarily. Sometimes parents are the best role models by showing their children what they should not do such as racking up credit card debt.

Interviewer: Oh, okay, I did not consider a bad role model actually being a good example...Since in this area there are many migrant families, does that make it more important to integrate financial literacy through the public school system?

Interviewee: The idea of financial literacy should be taught everywhere to children. Not all children's parents have the knowledge necessary to teach them...A trend I have been noticing lately is that fact that so many adults do not trust our institutions, including our banks. Many of

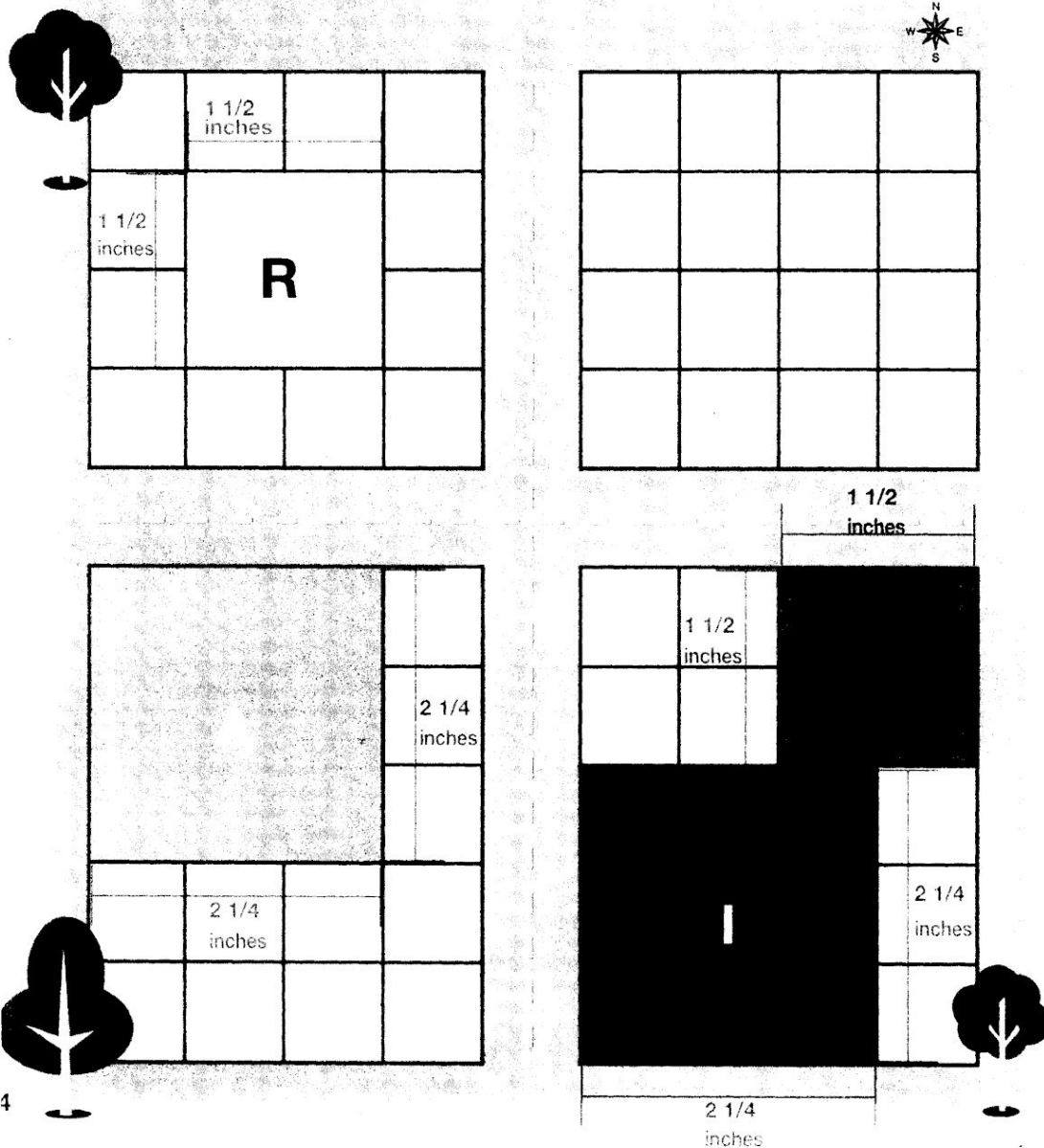
these children's parents do not have bank accounts and just deal with cash. This would not be considered a good financial habit.

Appendix B

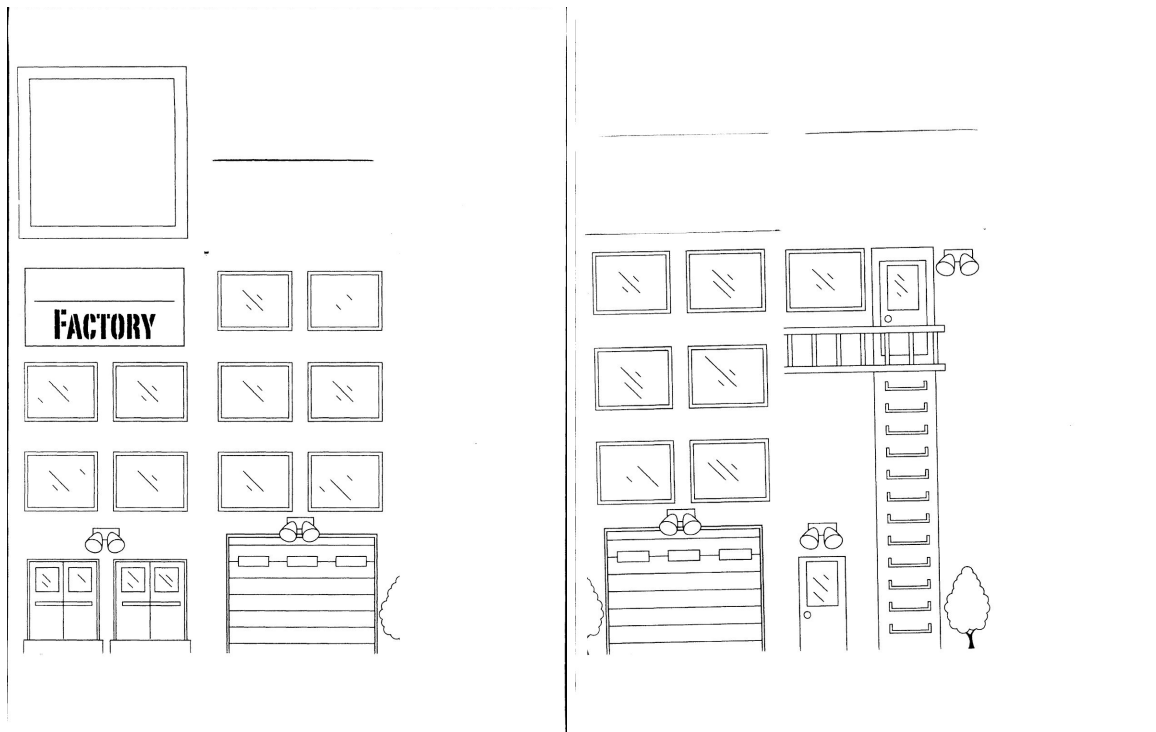


My City Zones

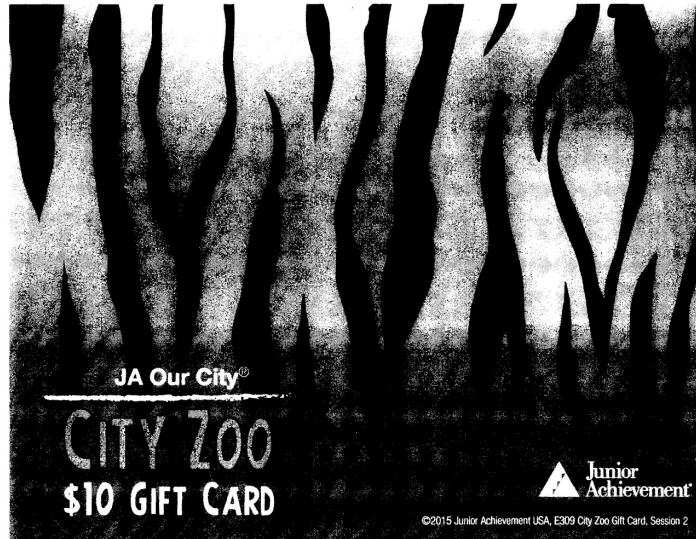
1. One of the zones is missing from the grid. Which one is it?
2. Correct! The Multipurpose zone is missing. Use your ruler and a pencil to draw a square in the open area. Your Multipurpose square can be large or small.
3. Color your square purple. Label your purple square with an M for multipurpose.
4. Use your ruler to measure how tall and wide the squares are. How tall and wide is your purple square?



Appendix D



Appendix E



Bug Notebook \$1.00	Nature Poster \$2.00	Rock Candy \$3.00	Glitter Pencil \$1.00	Dinosaur Stickers \$5.00
Sales tax: Add 5¢ to each \$1.00	Sales tax: Add 5¢ to each \$1.00	Sales tax: Add 5¢ to each \$1.00	Sales tax: Add 5¢ to each \$1.00	Sales tax: Add 5¢ to each \$1.00

Bug Notebook Answer: _____
 Nature Poster Answer: _____
 Rock Candy Answer: _____
 Glitter Pencils (4) Answer: _____
 Dinosaur Stickers Answer: _____

Do your math here.

Appendix F



Appendix G



Cash is money in the form of bills or coins. Take cash out of your savings account to buy goods or services.

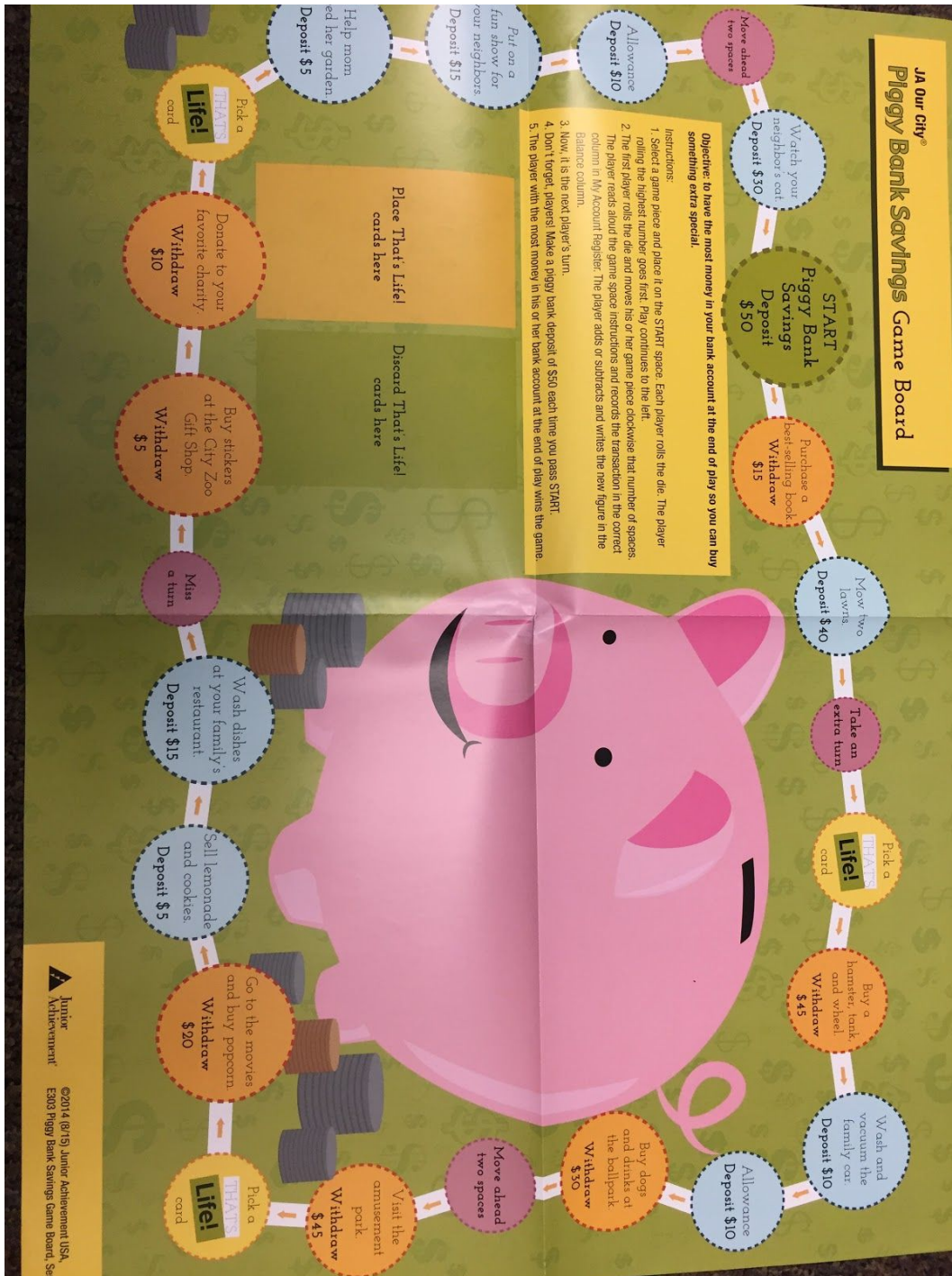
A **check** is a written order to a bank to pay money to a person or business.

A **debit card** subtracts what you buy from your checking account. Debit cards also can be used at ATMs (automated teller machines).

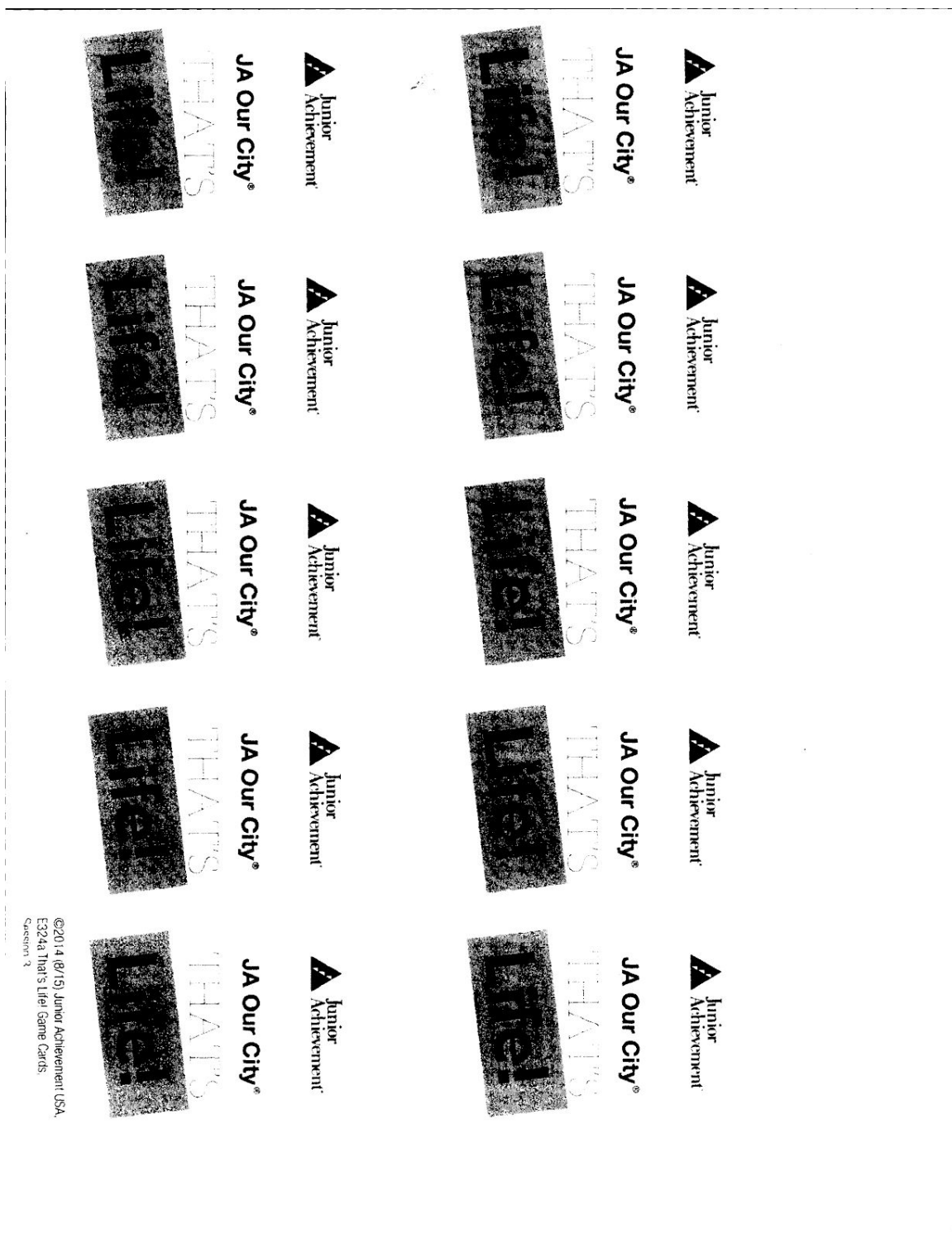
A **credit card** allows users to buy things through a personal loan. Credit card purchases are paid by the bank named on the card. The bank then bills you for the amount owed.

Electronic payment is a way to bank or pay for things using the Internet.

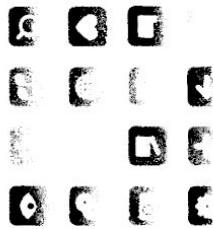
Appendix H



Appendix I



Download music
and buy a fun
new app.



Withdraw \$10

Fluffy needs a
new collar.



Withdraw \$10

Buy a new pair
of sneakers.



Withdraw \$60

Sweet! You buy an
ice cream sundae for
a friend.



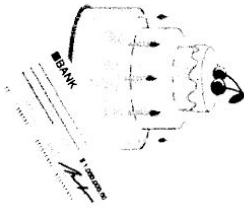
Withdraw \$5

Friends invite you to
go mini-golfing.



Withdraw \$10

Happy Birthday!
You receive a check
in the mail.



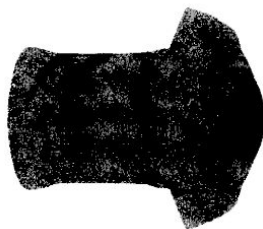
Deposit \$30

Go shopping at
the mall.



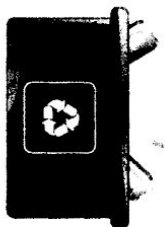
Withdraw \$50

Return a new shirt
that doesn't fit.



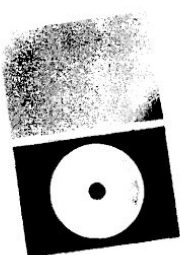
Deposit \$20

Take cans and
plastic bottles to the
recycling center.



Deposit \$5

You lose your friend's
favorite DVD.



Withdraw \$30

JA Our City[®]
My Account Register



Name: _____

[illegible]

Appendix K



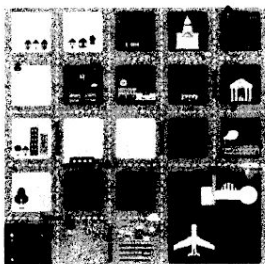
Name: _____

RECI-PS FOR SUCCESS

Entrepreneurs open new businesses to serve the people in the community. They also want their businesses to make money. You and your team are going to start a business—a restaurant. By sharing your excitement about your business with family, friends, and the city, you spread the news about your restaurant. After all, you want it to be the best in the city! You want qualified people to work and run your business. A strong team will increase sales. You also want to build strong relationships with your customers so they will trust you and your goods and services.

Instructions: Answer the following questions with complete sentences. Begin with a capital letter and end with a period.

Place: Where is the best place for your new restaurant? Look at the Zones Floor Map on the page. Circle the color box that represents the zone where you want to locate your restaurant.




Multipurpose zone


Business zone


Industrial zone

Product: What type of food will you serve? Do customers in JA Our City like to eat Italian, Indian, Mexican, American, or Asian food?

Price: How much will you charge for a meal at the restaurant? Do you want to charge \$6, \$7, \$8, or \$9 for a meal? If you charge more than other restaurants, will people buy your food? Look at the front of your handout for pricing examples.

People: Who will you hire first? Cooks? Chefs? Servers? Dishwashers? What skilled jobs will your restaurant need?

Promotion: What do you want to tell people about your new restaurant? What will you name your restaurant? If you could choose a symbol or logo to represent your new restaurant, what would it be? Draw a fun symbol or logo that will encourage people to come and eat at your restaurant.

RECI-PS BUSINESS PLAN

KIDS' MENU



Baked Chicken Nuggets \$4.00



Tossed Garden Salad \$3.50



Spaghetti with Tomato Sauce \$5.00



Carrots with Yogurt Dip \$2.50

DESSERTS

Oatmeal Cookie \$1.50

Ice Cream Cone \$2.50

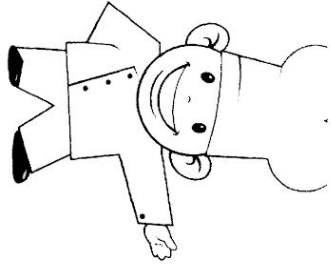


DRINKS

Milk, lemonade, juice \$2.00



Appendix L



1234 5678 9101 1213
10/2018
JOHN SMITH

XXI Century Bank DEPOSIT TICKET

Checks 1 0 0 0 0

NAME Rec-i-Ps Restaurant

DATE

DEPOSITS MAY NOT BE AVAILABLE FOR IMMEDIATE WITHDRAWAL

XXI Century Bank
1000 Bank Avenue
Yourtown, USA

TOTAL DEPOSIT

Account Number 0123 4567 8901 2345

XXI Century Bank

Name Rec-i-Ps Restaurant

Check No. 123

PAY TO THE ORDER OF City Utility Company

Date

\$ 40.00

Dollars

XXI Century Bank
1000 Bank Avenue
Yourtown, USANOT NEGOTIABLE
SAMPL E-VOID
DO NOT CASH

MEMO

Utility Bill

Account Number 0123 4567 8901 2345

Signature



RECI-PS PAYMENT SHEET

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