



LESSON PLAN - 3rd & 4th Grades

“The Boy Who Harnessed the Wind ”

by William Kamkwamba & Bryan Mealer

Lesson Plan: Money Choices Have Costs and Benefits

Grade Level: 3rd – 4th grades

Content Area: Personal Finance

Recommended Length/Duration: 1 hour

Essential Understanding: I can control my spending by understanding what my wants and my needs are. Limited resources mean I must learn how to make smart money choices. I can keep track of my income and expenses by using a budget.

Learning Goals: Students learn how to associate their wants and need with their spending choices. Students learn how to organize their income and expenses on a simple budget worksheet.

VTDOE Standards: Mathematics M3:4, M4:1 and History & Social Studies, H&SS3-4:20

The booklet, “Great Minds Think. A Kid’s Guide to Money” @2007 from the Federal Reserve Bank of Cleveland, was used as a resource in the budgeting section of this lesson. Thank you!

Description/Sequence:

How do we harness our spending?

(1) What does it mean to harness something? *Take responses.* A harness is something used on a horse to allow the rider to guide it. But the word harness may also mean: to get control of something and then be able to use it.

What are some things you might want to harness or control in your life? *Examples might be . . . your little brother, your time, your appetite, etc.* How can I harness my appetite—what I eat? *Walk students through the thought process of harnessing something. (1) I can decide not to eat so much candy because it is bad for my teeth. (2) I can stop buying candy at the store. (3) When I do eat candy, I will eat just one. Have students pick another example and tell you the steps they could take to harness it.*

One thing many adults would like to harness is how they spend their money. Have you ever spent your money on something you later regretted? I bet you wished you could have gone back and made a different choice on how you spent your money. How can we harness our spending?



Guide the discussion to include (1) knowing how much money you have; (2) having a money plan or budget to guide your spending; and (3) carefully making decisions about how much you will save or spend.

Making careful choices about how we save or spend our money means that we have more control—just like a harness controls the strength of a horse. The first choice that we make with our money is whether we will spend it on something we WANT or something we NEED. Even if you choose to save your money, you are still saving it to spend one day on a want or a need.

What is the difference between a want or need? *Take responses.* Let's see if you can identify a want from a need!

Show students each of the wants and needs cards in quick succession. Have students identify each by raising a hand to indicate whether each picture is a want or a need. Discuss any that they appear to be having problems with. Conclude the discussion by reinforcing the idea that we must spend our money first on our needs and then our wants.

(2) I'm going to read you a story now about a 14-year-old boy named William Kamkwamba. He lived in Malawi, Africa. Hard times came to his village and there was no money for food or going to school. But William came up with a creative way to solve his family's money problem—he built something that would harness the wind! While I read you the story, think about the things William wanted and needed.

Read the story.

- What were some of the things that William needed? (food, water, electricity, school fees)
- What one thing might have helped him get the things he needed? (money, money could come to the family through growing food and being able to sell it)
- How did William's needs motivate him to do something to meet those needs? (He went to the library to learn since he couldn't afford to go to school. He was hungry and wanted to find a way to bring water to his mother's garden to grow food. He hoped that building a windmill would allow him to pump water onto his mother's garden so they would never be hungry again.)

In this story, rain and money were scarce. That caused hard times for the village and led to William building the windmill as a solution to meet his needs. In our lives, we too can find that things we need are scarce—like money. The word SCARCITY just means there is not enough of something. We don't have unlimited money, so we have to make choices. If we just spend money on anything we want, we may not have money later for things that we need.

(3) We've talked about how a money plan or budget can help us harness our spending—give us more control of our money. We're going to practice making a budget. Distribute a budget worksheet to each student. We're going to help a student named Kayla make choices on how to spend and save her money. *Go over the budget worksheet. Use a white board to write down the answers in the appropriate columns as you walk the class through the solutions.*

Let's look first at how much money Kayla has and where it is coming from. *Complete column A.*



Kayla’s income: weekly allowance, \$5; walks neighbor’s dog every day and is paid weekly, \$15; received a birthday gift, \$20. Kayla has three different sources of income for the week.

How much income does Kayla have? (\$40) *Have students put the total at the bottom of column A.* Kayla must decide how to spend her money. At the end of the week, she’d like to have money left over to save. She has come up with a list of choices. *Have students write down each of the expenses in column B and total them at the bottom.*

Kayla’s expenses:

- | | | |
|--|-------------|-------------|
| • Book for school assignment: | \$8 | need |
| • Trip to the movie & snacks: | \$14 | want |
| • Lunch at school (\$2 per day): | \$10 | need |
| • Birthday gift for her brother: | \$10 | want |
| • Cell phone (one month’s service): | \$30 | want |
| • Candy and gum: | \$4 | want |
| • Downloads to her MP3 player: | \$15 | want |
| • Donation to local food bank: | \$5 | want |

Does Kayla have enough money for all of these things? (no) Let’s help Kayla make choices. In column C choose whether an expense is a want or a need by writing that amount in the correct column. For example, go down to the candy and gum expenses. If you think it is a want, write \$4 in the want column. If you think it is a need, write \$4 in the need column. *Allow students time to complete and review answers.*

If we added up just the expenses that were needs, how much money would Kayla need? (\$18) If we subtracted that amount from her income, how much money would she have left over for expenses and to save? (\$22) How much money should she save? *Allow discussion. Communicate that students do not have to save all of the money, that it is okay to spend money on wants. Emphasize that it is important to think about our money choices before we spend it on something.*

On your worksheet, write down how much money you think Kayla should save. *Savings amount is written in the blank at the side of the sheet.* Now, if you have money left over, circle the wants you think Kayla should spend her remaining money on. Don’t overspend. Check your math to make sure that the amount you are spending on wants and your saving is not greater than \$22. *Direct students through the fill-in-the-blank equations at the bottom of the sheet. Collect the student worksheets to check for understanding.*

(4) Some things are necessary to survive, such as shelter, food and clothes. These needs are things we absolutely can’t do without. Other things are nice to have, but aren’t necessary to live, such as video games, candy and movie tickets. We can do without these wants, even though we might not like it. Hopefully, none of us will ever be in the situation that Williams was in—where hard times would force us to make choices to meet our needs. If we learn to harness our spending now, when



times are not difficult, we can be more ready to face any tough money times we have in our lives. We will also be able to control and grow the amount of money that we have so that we can meet our needs and our wants and help others along the way!

If time allows: Read the last two pages of the book that give the entire story about William and how he built a windmill. Also, on page 33 of this guide are a list of web videos that will allow your students to hear William tell his own story.

Materials Needed:

1. *The Boy Who Harnessed the Wind* by William Kamkwamba & Bryan Nealer
2. Wants versus needs choice cards
3. White board and markers
4. Copies of budget worksheet for each student

Supplemental Information:

Turn to page 33 of this guide for a list of web sites with additional information on William Kamkwamba.



BODGET WORKSHEET

COLUMN A - INCOME		COLUMN B - EXPENSES		COLUMN C	
SOURCE	AMOUNT	SOURCE	AMOUNT	WANTS	NEEDS
TOTAL:		TOTAL:		TOTAL:	TOTAL:

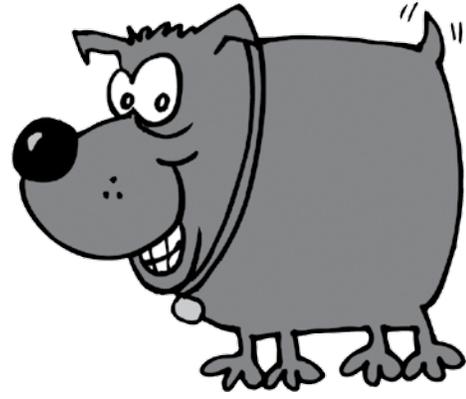
The amount you are spending and saving must be equal to your income.

How much is for saving?

$$\begin{array}{r}
 \text{Income} \\
 - \\
 \text{Savings} \\
 \hline
 = \\
 \text{Money for Expenses} \\
 - \\
 \text{Expenses} \\
 \hline
 = \\
 \mathbf{0}
 \end{array}$$



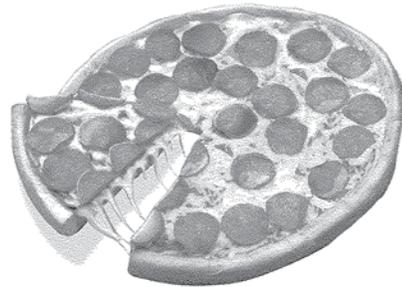
Candy



Pets



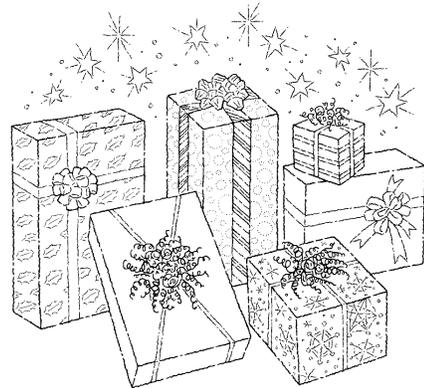
Drinks



Foods



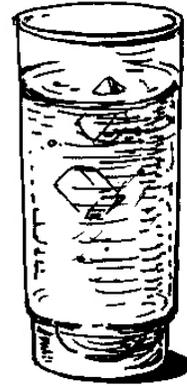
Toys



Presents



Food



Water



Clothes



Health Care



Education



Shelter