Milton Bradley
Unit Study

Subjects:
Reading, Math, Writing, History, Design

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Thank you for downloading our Milton Bradley Unit Study! It was created to be used with the book: *Who Was Milton Bradley*?. You may incorporate other books about Milton Bradley, as well. Here is what is included in the study:

Pages 3-7: **Facts about Milton Bradley:** Notetaking sheets with answer key.

Pages 8-12: **Timeline of Milton Bradley’s Life and Company:** Students may write on timeline or cut and glue events provided.

Pages 13-17: **Game Design Plan with Templates:** Children can use the organizer to design their own game. Templates for making their own custom dice and game board are included.

Pages 18-19: **Patent Application** Children can practice their writing and drawing skills by creating a patent application for their game or another invention.

Page 20-27: **Starting a Business Math Activity:** Children can practice their math skills while thinking through how a business decides to price a product or service. Answer key is provided. A worksheet is provided to help them think through how they would price their game they designed in the earlier activity.

Page 28: **Compare and Contrast Games** Children can work on their analyzing skills by picking two games and comparing them.

Also refer to our post: **Milton Bradley FREE Unit Study** for:
1. A list of popular Milton Bradley games.
2. Rebus puzzles to solve.
3. A video about how to make your own zoetrope.
4. Related books and games.

**Credits**

Frames by: [Alina V Design](https://www.peanutbutterfishlessons.com)

**You May Also Like:**

[Take a Look](https://www.peanutbutterfishlessons.com)
Facts about Milton Bradley

Birth (date and place):

Known For:

Family:

Places he went to school:

Jobs before he opened his own business:

Business ventures he tried:

Name: ___________________
Facts about Milton Bradley (cont.)

Business ventures he tried (cont.):
____________________________________________________
____________________________________________________
____________________________________________________
____________________________________________________
____________________________________________________
____________________________________________________

Games he created:
____________________________________________________
____________________________________________________
____________________________________________________
____________________________________________________
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____________________________________________________

What are some problems he ran into with his game business and how did he solve them?
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Name: ___________________
Other products he created besides games:

____________________________________________________
____________________________________________________
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What happened to the Milton Bradley Company after Milton retired?

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Facts about Milton Bradley (answer key)

Birth (date and place): Born November 8, 1936 in Vienna, Maine.

Known For: Designing games and starting a large company that made games and other related products.

Family: Parents were Lewis, carpenter and factory worker, and Fannie. He married Vilona Eaton in 1860, but she died 7 years later. He married Ellen Thayer in 1867 and had two daughters with her.

Places he went to school:
Lowell Grammar School and Lawrence Scientific School for art.

Jobs before he opened his own business:
Worked with a draftsmen and sold paper, pens, and ink. Worked at Wason Car Manufacturing Company.

Business ventures he tried:
Set up an office as a mechanical draftsmen and patent writer. Changed his office to a printer’s office. Created and sold the Checkered Game of Life. Made and sold prints of Abraham Lincoln. Drafted plans for new guns for the local militia.

Games he created:
Checkered Game of Life
Game Kit for Soldiers
Modern Hieroglyphics or Picture Writings for the Times
Patriot Heroes or Who’s Traitors
Croquet Set
The Mystic Fifteen Puzzle
Kerion
Happy Days in Old New England

Name: ___________________
What are some problems he ran into with his game business and how did he solve them?
This is list is not all inclusive, but provides some examples:

It took a lot of time to make all the games by hand so he hired an assistant.

His Rebus puzzles were popular so he had to keep inventing more. He solved this by having customers send in ideas for the puzzles and paying them if theirs was selected.

The company grew so much that they couldn’t continue to make games by hand with just a few assistants. He hired someone to run the business so he could continue designing new games. He also borrowed money to keep the company growing.

Other products he created besides games:
Myriopticon
Zoetrope
Buffalo Bill Gun
Jigsaw Puzzles
School supplies: desks, chairs, tables, chalkboards, paints, paper, toys and games.

What happened to the Milton Bradley Company after Milton retired?
His friend, George Tapley, took over. It stayed in business throughout the depression and made airplane parts during World War II. After the war, it created many new games eventually started making electronic and video games. In 1984, it was sold to Hasbro.
## Events for the Timeline

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
<th>Year</th>
<th>Event</th>
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<tbody>
<tr>
<td>1836</td>
<td>Milton Bradley is born.</td>
<td></td>
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<tr>
<td>1847</td>
<td>Family moves to Massachusetts.</td>
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<tr>
<td>1854</td>
<td>Finished high school.</td>
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<tr>
<td>1855</td>
<td>Began art school at Lawrence Scientific School.</td>
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<tr>
<td>1856</td>
<td>Moves to Springfield, MA on his own.</td>
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<tr>
<td>1856</td>
<td>Takes a job at Wason Car Manufacturing Company.</td>
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<tr>
<td>1858</td>
<td>Opens his own drafting and patent office.</td>
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<tr>
<td>1860</td>
<td>Creates and sells several hundred copies of the Checkered Game of Life.</td>
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<tr>
<td>1860</td>
<td>Marries Vilona.</td>
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<td>1861</td>
<td>Creates game kits for Civil War soldiers.</td>
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<td>1864</td>
<td>Brings in investors and expands business.</td>
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<tr>
<td>1866</td>
<td>Creates Zoetrope and Myriopticon.</td>
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<tr>
<td>1867</td>
<td>Produced The Mystic Fifteen Puzzle.</td>
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<tr>
<td>1867</td>
<td>Vilona dies.</td>
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<tr>
<td>1869</td>
<td>Marries Nellie.</td>
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<tr>
<td>1868, 1870</td>
<td>Company moves into bigger buildings.</td>
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<tr>
<td>1874</td>
<td>His daughter, Florence, is born.</td>
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<tr>
<td>1881</td>
<td>His second daughter, Lillian, is born.</td>
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<tr>
<td>Year</td>
<td>Event</td>
<td>Event</td>
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<td>-----------</td>
<td>------------------------------------------------------------</td>
<td>------------------------------------------------------------</td>
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<tr>
<td>1890ish</td>
<td>Starts producing school supplies.</td>
<td>Starts producing school supplies.</td>
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<td>1907</td>
<td>Milton Bradley retires from his company.</td>
<td>Milton Bradley retires from his company.</td>
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<tr>
<td>1927</td>
<td>Cootie is invented.</td>
<td>Cootie is invented.</td>
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<tr>
<td>1947</td>
<td>Stratego is invented.</td>
<td>Stratego is invented.</td>
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<tr>
<td>1949</td>
<td>Candy Land is invented.</td>
<td>Candy Land is invented.</td>
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<tr>
<td>1963</td>
<td>100th Anniversary of the Game of Life is introduced.</td>
<td>100th Anniversary of the Game of Life is introduced.</td>
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<tr>
<td>1965</td>
<td>Barrel of Monkeys, Operation and Trouble are invented.</td>
<td>Barrel of Monkeys, Operation and Trouble are invented.</td>
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<tr>
<td>1966</td>
<td>Twister is invented.</td>
<td>Twister is invented.</td>
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<tr>
<td>1967</td>
<td>Battleship is invented.</td>
<td>Battleship is invented.</td>
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<td>1969</td>
<td>Ants in the Pants is invented.</td>
<td>Ants in the Pants is invented.</td>
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<td>1974</td>
<td>Connect Four is invented.</td>
<td>Connect Four is invented.</td>
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<tr>
<td>1981</td>
<td>Axis and Allies is invented.</td>
<td>Axis and Allies is invented.</td>
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Timeline of Milton Bradley’s Life & Company

Cut out and glue the events and games where they go on the timeline or write in the events you want to include.
Timeline of Milton Bradley’s Life & Company
Timeline of Milton Bradley’s Life & Company
Game Design Plan

You may want to look at instructions from one of your games for ideas.

What type of game will you make? (Examples: board game, dice game, card game, role playing game, etc.)

What will be the subject of the game? (Examples: history, science, life skills, math, colors, shapes, etc.)

What will be the goal of the game? (i.e., How will someone win the game?)

What pieces and materials will you need for your game?

Draw a picture if needed:
Game Design Plan

How many players will play? __________________________

How will the game be set up?

__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

How does the game start?

__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

Rules to game:

__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
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What is the name of the game?

____________________________________________________
Print on Cardstock

This can be used to make your own custom dice for your game if you would like. Just draw a picture on each side.

A blank game board is included on the next two pages, as well.
Patent Application

Name of invention you are seeking a patent for:

Name of inventor(s):

Written description of your invention. Make sure to include details that show what it is used for and how it is unique from other inventions like it:
Patent Application

Draw what your invention looks like. Make sure to include all pieces and views of different sides. Use additional paper if necessary.

Signature and Date:
____________________________________________________
Mr. Bradley started several businesses as a young man. For a business to be successful, you need to sell enough products for enough money to cover your costs of making the product and ideally to pay you for the time you spent inventing it and making it.

Work through these sample business start-ups to determine how profitable they are.

PRINTING BUSINESS
The goal of this business is to print and sell children’s picture books.

Cost of Printing Press with pieces $250.00 (purchased with a loan)

Cost of Paper $ .01/sheet
Cost of Ink $ .01/sheet
Cost of String to put book together $ .02/book

1. How much does it cost to print a book with 10 pages not counting the original cost of the printing press?

2. If you sell these books for a quarter and use the extra money to pay off the loan for the printing press, how many books do you need to sell to pay back the loan?
3. If you sell these books for $.50 and use the extra money to pay off the loan for the printing press, how many books do you need to sell to pay back the loan?

4. If you can make and sell 250 books a week, how many weeks will it take you to pay off the loan if the books are sold for a quarter each?

What if they are $.50 each?

5. Once the loan for the printing press is paid off, how much money will you make each week if you keep selling 250 books for a quarter each?

What if they are $.50 each?

Do these sound like good business plans? Why or why not?
LAWN MOWING BUSINESS
The goal of this business is to mow people's lawns.

Cost of Lawnmower $300.00
Cost of Weed Trimmer $125.00
(both purchased with a loan)

Cost of Gas $1.25/lawn

1. If you mow lawns for $5.00 and use the extra money after paying for gas to pay off the loan for the equipment, how many lawns do you need to mow to pay back the loan?

2. If you mow lawns for $10.00 and use the extra money to pay off the loan for the equipment, how many lawns do you need to mow to pay back the loan?

3. If you can mow 30 lawns a week, how many weeks will it take you to pay off the loan if you charge $5.00 for each lawn?
What if you charge $10 each?

If only 20 people will pay you $10 to mow their lawn each week, how long will it take to pay off the loan?

5. Once the loan for the equipment is paid off, how much money will you make each week if you keep mowing 30 lawns a week for $5.00 each?

What if you mow 20 lawns for $10 each?

Does this sound like a good business plan? Why or why not?

____________________________________________________
____________________________________________________
____________________________________________________
Now think about the game you designed. What supplies would you need to create it and how much would they cost per game? List the information below.

<table>
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<tr>
<th>Supply</th>
<th>Cost</th>
<th>Notes</th>
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Total Cost per Game

Now that you know how much the game costs to make, how much do you think you would charge for it and how many games do you think you might sell at that price? How much total money might you make at each price point?

<table>
<thead>
<tr>
<th>Price</th>
<th>Price - Cost to Make =</th>
<th>How Many Sold</th>
<th>Total Amount Made</th>
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What do you think the best price will be? Does this sound like a good business plan? Why or why not?

____________________________________________________
____________________________________________________
____________________________________________________
Starting a Business (Answer Key)

PRINTING BUSINESS

1. How much does it cost to print a book with 10 pages not counting the original cost of the printing press?

$0.22

2. If you sell these books for a quarter and use the extra money to pay off the loan for the printing press, how many books do you need to sell to pay back the loan?

$0.25 -$0.22 = $0.03/per book toward loan
$250.00 ÷ $.03 = 8334 books

3. If you sell these books for $.50 and use the extra money to pay off the loan for the printing press, how many books do you need to sell to pay back the loan?

$0.50 -$0.22 = $0.28/per book toward loan
$250.00 ÷ $.28 = 893 books

4. If you can make and sell 250 books a week, how many weeks will it take you to pay off the loan if the books are sold for a quarter each?

8334 ÷ 250 = just under 34 weeks

5. What if they are $.50 each?

893 books ÷ 250 = just under 4 weeks
5. Once the loan for the printing press is paid off, how much money will you make each week if you keep selling 250 books for a quarter each?

250 \times \$0.03 = \$7.50

What if they are \$0.50 each?

250 \times \$0.28 = \$70

Do these sound like good business plans? Why or why not? Answers will vary. May want to discuss whether the same amount of people will pay \$0.50 for the book as will pay \$0.25.

LAWN MOWING BUSINESS

1. If you mow lawns for \$5.00 and use the extra money after paying for gas to pay off the loan for the equipment, how many lawns do you need to mow to pay back the loan?

\$5.00 - \$1.25 = \$3.75/lawn
\$300 + \$125 = \$425 loan
\$425 \div \$3.75 = 114 lawns

2. If you mow lawns for \$10.00 and use the extra money to pay off the loan for the equipment, how many lawns do you need to mow to pay back the loan?

\$10.00 - \$1.25 = \$8.75
\$425 \div \$8.75 = 49 lawns
3. If you can mow 30 lawns a week, how many weeks will it take you to pay off the loan if you charge $5.00 for each lawn?

$114 \div 30 = \text{just under 4 weeks}$

What if you charge $10 each?

$49 \div 30 = \text{just under 2 weeks}$

If only 20 people will pay you $10 to mow their loan each week, how long will it take to pay off the loan?

$49 \div 20 = \text{just under 3 weeks}$

5. Once the loan for the equipment is paid off, how much money will you make each week if you keep mowing 30 lawns a week for $5.00 each?

$5.00 - $1.25 = $3.75/lawn$
$30 \times 3.75 = $112.50/week$

What if you mow 20 lawns for $10 each?

$10.00 - $1.25 = $8.75$
$20 \times 8.75 = $175/week$

Does this sound like a good business plan? Why or why not?

Answers will vary. Interesting to discuss how mowing less lawns for more money actually earns more money per week!
Compare and Contrast Games

Pick two games and compare them by writing similarities between the two games in the section where the circles overlap and characteristics unique to each game in the corresponding circle outside of the overlapping area.
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Thank you, Randi Smith