

A photograph of six wooden letter tiles arranged in a row on a dark, textured wooden surface. The tiles spell out 'GAME ON'. Each tile has a letter in a bold, sans-serif font and a small subscript number in the bottom right corner. The tiles are light-colored wood, and the background is a dark, mottled wood grain. The lighting is soft, casting slight shadows to the right of the tiles.

G₂ A₁ M₃ E₁ O₁ N₁

An Investigation Into Board Games for Gifted Learners

Introduction

Rationale

In the beginning phases of this unit, I was very focused on making a fun, engaging unit that students would love. I have always loved playing board games and have so many memories with my sister playing board games with my family. I began to learn the concept of money and real estate in Monopoly, the art of the "poker face" in Clue, finesse and coordination in Jenga, stamina in Life, and so much more. Board games not only brought me closer to my family but, taught me concepts that I was not necessarily learning in school. They challenged my abilities in new ways and helped me develop essential critical thinking skills that helped me academically. Board games provided opportunities for my parents to explain things that I would have had no idea to even ask about!

When I set out to design this unit, I was hoping to do two main things: make it fun and spark an interest in concepts that students had not explored before. While "making it fun" seemed easy at first, it was challenging to think through the possible scenarios for each of the 4 days of camp. I was concerned about it becoming boring or stale. Would they be engaged the whole time? What if they had played all these games before? What if they had never played any? I wanted students to go beyond game play and take an investigative look at strategy and the meaning behind their favorite games.

I also wanted to spark students' interest in concepts they may not have been exposed to before and take a more in-depth look at what different things can mean to different people, in different scenarios. My overarching concept was "investigation" but, concepts developed as a result. Students examined strategy, creativity, and teamwork throughout the week.

Differentiation for Gifted Learners

This unit is ideal for gifted learners as it explores many challenging concepts that have a lot of room for misconception, as well as opportunities to gain a deeper understanding of concepts in which they already feel comfortable. In addition, students worked in a non-standard environment then they are used to in their regular education setting.

The concept of investigation was familiar to most students at a surface level. When I asked what investigation was, the majority of students could only say it was "like an experiment". So, being able to fully unpack what "investigating" something really means was a focal point of the unit. The students learned that investigation takes time, sometimes years or decades! All of the students knew what "strategy" and "creation" meant but, again, the understanding was surface-level.

Students were required to work together daily, which can be quite challenging for gifted students who are less used to being surrounded by their gifted peers, as gifted students are often spread out among a grade level. Challenging students to work with entire groups of their gifted peers can present a unique set of obstacles to overcome.

Target Audience

This unit is perfect for students who love board games but, it can also be great for students who appreciate game strategy, problem solving, and creation. This unit allows for students to play 12 board games and look closely at the strategy, strengths, and weaknesses for each game. For students who have played lots of board games, this unit would be a great way to hone in on their specific strategies for each game. For students who are new to board games and just want to learn more, this unit can be a great introduction to many different types of board games. The unit can be used flexibly to meet student needs.

Goals

Content Goal 1: Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.

Content Goal 2: Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.

Students will learn:

- that creation involves testing and revising.
- to make decisions based on needs and wants.
- how to formulate a plan for creation.
- about Milton Bradley and how he became a popular board game maker.

Process Goal 1: Work together in teams to create a new board game.

Students will be able to:

- develop a plan for creating a board game.
- use the SCAMPER creative thinking technique.
- participate in a Socratic seminar
- articulate ideas about board game strategies to their group.
- assess strengths and weaknesses of various game designs.
- think critically about game play.

Concept Goal 1: Understand how investigation leads to creation.

Students will understand:

- that investigation is essential to the process of creation.
- that the creation process can take time.
- how to think critically about game play.

Assessment Plan

Students will be informally assessed each day through a series of questions and discussions in which the teacher will be able to evaluate understanding. Misconceptions will be addressed as they arise, with the teacher focusing on student understanding of the main goals listed above.

Day 1- Questioning

Students will be formatively assessed on their understanding of the concept and essential understanding through high-level questioning that prompt a rich and complex discussion. Students will be encouraged to think deeply about what "investigation" means and how it will inform their creation.

Day 2- Bruner

Students will step inside the mind of famous game maker Milton Bradley and take an investigative look at the process he followed to create some of the most popular games of all time. Students will synthesize information in groups and present findings to the class. The teacher will focus on how today's investigation of a game expert is continuing to inform the creation of their own board game.

Day 3- Socratic Seminar

Students will participate in a Socratic Seminar and use a sheet to track their comments and level of participation. The teacher will then use this to evaluate student understanding by assessing the type of comments students made and the level of questions they asked during the seminar.

Day 4- Problem Based

The final assessment will be in the form of a Performance Task at the culmination of the unit where students will use the ideas and information collected throughout the week's investigation to create their own board game.

Performance Task

As a popular board game designer this week, your task is to create the next new board game that all the kids your age are just itching to play.

You will thoroughly investigate strategy, design, rules, and more in order to inform this board game creation. One day, you will even step into the shoes of one of the most famous game makers! Working together with your group, you will plan, design, build, and test an amazing new board game that kids just like you won't be able to quit playing. Your game will be complete with a set of rules, a game board, and a clear path to victory! At the end of the week, you will have a chance to play other games and provide feedback to your peers on how to make their games better. Likewise, your peers will also assist you in making your game the best that it can be.

This journey will require patience, perseverance, and creativity along with a lot of determination and I know you are up for the challenge!

TEACHER NAME		Lesson #
Katie Yunker		1
MODEL	CONTENT AREA	GRADE LEVEL
Questioning	STEM (engineering and design)	3-5
CONCEPTUAL LENS		LESSON TOPIC
Investigation		Board Games
LEARNING OBJECTIVES (from State/Local Curriculum)		
3-5-ETS1-2.	Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.	
3-5-ETS1-3.	Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.	
THE ESSENTIAL UNDERSTANDING (What is the overarching idea students will understand as a result of this lesson?)		THE ESSENTIAL QUESTION (What question will be asked to lead students to “uncover” the Essential Understanding)
Investigation informs creation.		How does investigation inform creation?
CONTENT KNOWLEDGE (What factual information will students learn in this lesson?)		PROCESS SKILLS (What will students be able to do as a result of this lesson?)
Students will know: - that investigation is essential to the process of creation. - that creation involves testing and revising. - that investigation indicates curiosity. - that creating a board game requires planning.		Students will be able to: - develop a plan for creating a board game. - make decisions based on needs and wants. - think critically about game play. - organize thoughts into a graphic organizer.

GUIDING QUESTIONS

What questions will be asked to support instruction?

Include both “lesson plan level” questions as well as questions designed to guide students to the essential understanding

Pre-Lesson Questions:	During Lesson Questions:	Post Lesson Questions:
1. What do all these board games have in common? 2. What kind of strategies do you use when playing board games? 3. What are the different strategies for these different games? 4. What are the different types of board games? 5. What do you like and dislike about board games you have played? 6. What makes a board game fun? 7. What makes a board game boring? 8. What does it mean to “investigate”? 9. What will you have to investigate in order to create your game? 10. Why might we investigate different games? 11. What may result from investigating different games, their characteristics, and how we play them?	1. What strategies work best to help someone win this game? 2. What is the “goal” of this game? 3. How does the goal of the game relate to the gameplay? 4. What are the drawbacks of this game? 5. What is the most exciting part of this game? 6. How do the rules of the game ensure fairness? 7. What skills are required to be successful in this game? 8. What makes this game exciting, addicting, challenging, engaging, etc.? 9. How would you improve this board game? 10. What are the most important investigation revelations?	1. How will today’s investigation inform your creation of a board game? 2. What similarities and differences did you observe from the games today? 3. How will you decide what type game you will create? 4. What factors are most important to you as you decide on the type of game to create? 5. What challenges do you think you might encounter? 6. What do you predict will be the easiest and hardest part about creating a new game? 7. How does investigation inform creation?

DIFFERENTIATION		
(Describe how the planned learning experience has been modified to meet the needs of gifted learners. Note: Modifications may be in one or more of the areas below. Only provide details for the area(s) that have been differentiated for this lesson.)		
Content	Process	Product
	Learning Environment	

PLANNED LEARNING EXPERIENCES

(What will the teacher input? What will the students be asked to do? For clarity, please provide detailed instructions)

Engage and Connect- This phase focuses on piquing students' interest and helping them access prior knowledge. This is the introduction to the lesson that motivates or hooks the students.

Students will enter the room and notice board games set up around the various tables. They will be given an index card to write down 3 board games they have played before. Once finished, students will circulate around the room playing "Give 1, Get 1" where they will tell one of their board games and hear one from someone else. If they hear a board game they do not have listed, they will add it to their list. After about 3 minutes, the teacher will make a master list of board games on chart paper for everyone to see.

The teacher will open a general discussion about board games and create a "thought cloud" on the board about board games. Use the "pre-lesson questions" listed above to guide their thought process.

****To create a thought cloud,** draw a bubble and write "BOARD GAMES" in the middle. Then elicit student contributions to create fill the space around the bubble with anything they know about board games. It can be names of board games, rules, etc.

Tell students they will be taking a critical look at board games this week and then designing their own. The teacher will introduce the Performance Task and have students decide whether they will work alone, with a partner, or in a small group of 3.

Explore - In this phase, the students have experiences with the concepts and ideas of the lesson. Students are encouraged to work together without direct instruction from the teacher. The teacher acts as a facilitator. Students observe, question, and investigate the concepts to develop fundamental awareness of the nature of the materials and ideas.

Students will have the opportunity to play the 6 board games around the room. They will be asked to form groups according to the folder color that they chose when they came in on the first day.

Students will be asked to "take notes" on each game using a graphic organizer provided to them. The teacher will post the "during lesson questions" on the board to guide students note taking as they play the games. Their goal is to take an investigative look at the rules, procedures, strategies, and game play of the various board games in order to inform the creation of a new game. The teacher will encourage students to move beyond superficial comments like "it's hard" and "it's boring" and instead think of, for instance, WHY the game is boring and what could be done to improve it.

Explain - Students communicate what they have learned so far and figure out what it means. This phase also provides an opportunity for teachers to directly introduce a concept, process, or skill to guide students toward a deeper understanding.

Students will be asked to form groups of 4 to compare notes on each particular game. Students should note (highlight or asterisk) things that multiple people noticed about any particular game by revisiting the During Lesson Questions. The purpose of this is for students to glean the commonalities that are shared. The teacher will share with students that investigating the common strengths and weaknesses will be used to inform the creation of their own game.

Elaborate –Allow students to use their new knowledge and continue to explore its implications. At this stage students expand on the concepts they have learned, make connections to other related concepts, and apply their understandings to the world around them in new ways

The teacher will bring the class back together and open another discussion about each game. The observations for each game will be listed on a piece of chart paper labeled with the name of each game. As students are sharing, the teacher will guide their thinking to focus on 3 major topics: the strengths and weaknesses of the games, the type of game (skill, strategy, or luck), and the ways to improve the game. The teacher will use the “post-lesson questions” to frame this discussion. Again, the teacher will share with students that investigating the common strengths and weaknesses will be used to inform the creation of their own game.

Evaluate: This phase assesses both learning and teaching and can use a wide variety of informal and formal assessment strategies.

Students will be reminded of the objective to create a game. Teacher will then ask students to share ONE new idea that they had today about their game. The teacher will ask how today’s investigation will aid in the creation of their game. Students will be reminded to think about what their game might look like tonight!

TEACHER NAME		Lesson #
Katie Yunker		2
MODEL	CONTENT AREA	GRADE LEVEL
Bruner	STEM	3-5
CONCEPTUAL LENS		LESSON TOPIC
Investigation		board games
LEARNING OBJECTIVES <i>(from State/Local Curriculum)</i>		
3-5-ETS1-2.	Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.	
3-5-ETS1-3.	Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.	

THE ESSENTIAL UNDERSTANDING (What is the overarching idea students will understand as a result of this lesson?)		THE ESSENTIAL QUESTION (What question will be asked to lead students to “uncover” the Essential Understanding)	
Investigation informs creation.		How does investigation inform creation?	
CONTENT KNOWLEDGE (What factual information will students learn in this lesson?)		PROCESS SKILLS (What will students be able to do as a result of this lesson?)	
Students will learn: • characteristics of popular board games. • the SCAMPER creative thinking technique • strengths and weaknesses of various game designs. • about Milton Bradley and how he became a popular board game maker.		Students will be able to: • articulate ideas about board game strategies to their group. describe the SCAMPER technique. • answer open ended questions about their thoughts and opinions on different board games. • start formulating a plan to create their own board game.	
GUIDING QUESTIONS What questions will be asked to support instruction? Include both “lesson plan level” questions as well as questions designed to guide students to the essential understanding			
Pre-Lesson Questions:		During Lesson Questions:	
• Who is shown in this picture? • What do you already know about Milton Bradley? • What are essential character traits of a game designer? • What were early games like? • What tools do game designers use? • What skills to game designers needs? • How can games affect families and communities?		• How did Milton's childhood contribute to his success as an adult? • What character traits describe Milton and why? • What are essential character traits of a game designer? • How did the purchase of a printing press "pave the way" for Milton's future career? • What made Milton's "Game of Life" so popular? • How did the "Game of Life" turn into the "Game Kit for Soldiers"?	
		Post Lesson Questions:	
		• What new ideas did the SCAMPER technique flesh out? • How can you used what you learned today to start planning your game? • What is important to remember when planning a game? • How can the SCAMPER technique help inform the creation of your board game? • What materials will your group need outside of what is provided? • How has today’s investigation of Milton Bradley	

	• The end of the Civil War was a time when most businesses struggled yet, Milton Bradley Co. did not. Why do you think that is? • How did Milton Bradley change the education?	informed the creation of your board game?
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DIFFERENTIATION

(Describe how the planned learning experience has been modified to meet the needs of gifted learners. Note: Modifications may be in one or more of the areas below. Only provide details for the area(s) that have been differentiated for this lesson.)

Content	Process	Product	Learning Environment
The students are exposed to an indepth reading about Milton Bradley where they will discover how small decisions affected a person's life and, ultimately, the entire education system.	Students will work in groups to flesh out complex ideas about varoius board games and provide support for their responses. The Bruner model challenges students to step inside the mind of a real game designer and contemplate the challenges that they may face when designing a new game.		Students will work in pre-determined groups to create a unique visual to display information.

PLANNED LEARNING EXPERIENCES

(What will the teacher input? What will the students be asked to do? For clarity, please provide detailed instructions)

Engage and Connect - *This phase focuses on piquing students' interest and helping them access prior knowledge. This is the introduction to the lesson that motivates or hooks the students.*

Students will enter the room and see a picture of Milton Bradley displayed on the board with the question "Who is this?" Students will be asked to discuss guesses with each other (or an "elbow partner").

Explore - *In this phase, the students have experiences with the concepts and ideas of the lesson. Students are encouraged to work together without direct instruction from the teacher. The teacher acts as a facilitator. Students observe, question, and investigate the concepts to develop fundamental awareness of the nature of the materials and ideas.*

Students will offer their guesses before teacher revealing some pictures of game boards (all games by the game company "Milton Bradley".) After a few more guesses, the teacher will read the introduction to the book "Who Was Milton Bradley?" aloud to students and invite students to share anything they already know about Milton Bradley.

Students will be placed in 6 groups of 3 and given a copy of the book "Who Was Milton Bradley?"

BUILD FAMILIARITY

Each group will have a chapter to read before then creating a display that shows the main idea of that chapter. Students can be as creative as they want and add pictures, phrases, diagrams, etc. The idea is to share the most pertinent information from that

Groups

Chess- Chapter 1
Elias and Josie

Monopoly- Chapter 2
Joe and Kamali

Backgammon- Chapter 3
Annabelle and John

Parcheesi- Chapter 4
Lucy and Tyler

Trivial Pursuit- Chapter 5

Claudia and Rory

Mancala- Chapter 6

Andre and Andrew

Apples to Apples- Chapter 7

Greta and Louise

Operation- Chapter 8

Tyler and Katie

Cranium- Chapter 9

JD and Chuanqui

Explain - *Students communicate what they have learned so far and figure out what it means. This phase also provides an opportunity for teachers to directly introduce a concept, process, or skill to guide students toward a deeper understanding.*

Student groups share their posters in order, thus creating a quick summary of the book. The teacher asks the “During Lesson Questions” at this time.

Elaborate –*Allow students to use their new knowledge and continue to explore its implications. At this stage students expand on the concepts they have learned, make connections to other related concepts, and apply their understandings to the world around them in new ways*

The teacher introduces the SCAMPER technique with the Google Slides presentation to frame today’s activity around this concept.

PRACTICING THE DISCIPLINE

Students will be playing Milton Bradley games and taking a critical look at how they are played, much like Milton Bradley would have! They will take on the role of Game Designer. Traveling in their game design groups, students will visit the different games around the room in timed rotations. During their time at each games, the groups an play the game and observe others playing the game as they discuss possibilities for each SCAMPER criteria.

The teacher will model the use of this technique with a familiar game (Monopoly). The class will briefly go through the process together and the anchor chart will remain on the board to be used as a guide.

Substitute

Combine

Adapt

Modify

Put to Another Use

Eliminate

Reverse

Students will be given another note catcher to record their thoughts. A reminder of the components, as well as some guiding questions will also be displayed.

Evaluate: *This phase assesses both learning and teaching and can use a wide variety of informal and formal assessment strategies.*

REFLECTION ON THE DISCIPLINE

Students will come back together and share ideas for each letter while teacher records thoughts on a piece of chart paper for each word. These can be used to refer to for the initial planning meeting. Teacher asks the “Post Lesson Questions” during this time. The teacher will focus on how today’s investigation is continuing to form the creation of their board game.

Students will then have time to work with their game design groups in order to brainstorm material needs and start formulating a plan.

TEACHER NAME		Lesson #
Katie Yunker		3
MODEL	CONTENT AREA	GRADE LEVEL
Socratic	STEM	3-5
CONCEPTUAL LENS		LESSON TOPIC
Investigation		board games
LEARNING OBJECTIVES <i>(from State/Local Curriculum)</i>		
3-5-ETS1-2.	Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.	
3-5-ETS1-3.	Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.	

THE ESSENTIAL UNDERSTANDING (What is the overarching idea students will understand as a result of this lesson?)		THE ESSENTIAL QUESTION (What question will be asked to lead students to “uncover” the Essential Understanding)	
Investigation informs creation.		How does investigation inform creation?	
CONTENT KNOWLEDGE (What factual information will students learn in this lesson?)		PROCESS SKILLS (What will students be able to do as a result of this lesson?)	
Students will learn: - characteristics of popular board games. - the socratic seminar process. - strengths and weaknesses of various game designs.		Students will be able to: - articulate ideas about board game strategies to their group. - answer open ended questions about their thoughts and opinions on different board games. - start formulating a plan to create their own board game. - participate in a Socratic Seminar.	
GUIDING QUESTIONS What questions will be asked to support instruction? Include both “lesson plan level” questions as well as questions designed to guide students to the essential understanding			
Pre-Lesson Questions:		During Lesson Questions:	
1. What is a debate? 2. What is a dialogue? 3. What are the differences in debate and dialogue? 4. What expectations do you think will help create a successful discussion? 5. What can you do when you have something to say but it is not your turn to talk? 6. What is an investigation? 7. How does one investigate something? 8. How could you investigate a board game? What would		1. What characteristics make a board game popular? 2. Different board games have different strategies. How can these strategies affect the gameplay? 3. Think of the different types of learners (visual, auditory, etc.) What games do you think each learner would like best and why? 4. What can people learn from board games? 5. What skills do board games help to teach? 6. Do some games have more than one	
		Post Lesson Questions:	
		1. What worked well during the socratic seminar? 2. What could be improved upon during the socratic seminar? 3. How will this investigation inform the creation of your board game? 4. How will today’s discussion inform the creation of your board game?	

that look like?	type of strategy? What are some examples? 7. Board games are generally skill based or luck based. What are the benefits and drawbacks for each type? 8. How can strategy be used in luck based games? 9. What made this an investigation? 10. What needs to be investigated before making a successful game?	
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DIFFERENTIATION

(Describe how the planned learning experience has been modified to meet the needs of gifted learners. Note: Modifications may be in one or more of the areas below. Only provide details for the area(s) that have been differentiated for this lesson.)

Content	Process	Product	Learning Environment
There will be games of varying difficulty included to allow for deeper and more thought-provoking discussion.	Students will be learning the process for the Socratic seminar, where participants to follow a protocol that can be challenging. Students will be asked open ended questions with no right or wrong answer. This can often be difficult for gifted students. Students will be required to provide support for their answers.		

PLANNED LEARNING EXPERIENCES

(What will the teacher input? What will the students be asked to do? For clarity, please provide detailed instructions)

Engage and Connect - *This phase focuses on piquing students' interest and helping them access prior knowledge. This is the introduction to the lesson that motivates or hooks the students.*

Students will enter and notice various board games set up around the room. Chairs will be arranged in the socratic formation (inner and outer circles).

Explore - *In this phase, the students have experiences with the concepts and ideas of the lesson. Students are encouraged to work together without direct instruction from the teacher. The teacher acts as a facilitator. Students observe, question, and investigate the concepts to develop fundamental awareness of the nature of the materials and ideas.*

The teacher will introduce the socratic seminar protocol to the students and explain that they will be participating in a seminar about board games. The teacher will begin by asking students to differentiate between behaviors that characterize debate (fact based, close minded, 2 opposing views, etc.) and those that characterize dialogue (conversation, less formal, open-ended, etc.). Students will work together in small groups for about 5 minutes to come up with differences between the two.

Once groups have had a chance to discuss, the teacher will facilitate a discussion and make a list of characteristics of both. The teacher will then tell students that during a socratic seminar they will be having a dialogue, not a debate. From there, the teacher and students will create a list of expectations for the seminar such as, be respectful, wait your turn to talk, disagree in a respectful manner, etc. The teacher will post this in a place where everyone can see. An example can be found here:

http://blog.mrwaddell.net/uploads/2016/08/SocraticSeminarGroundRulesPoster_000.pdf.

Students will now travel around the room for 15-20 minutes, taking notes and making observations about the various games (all games they played previously this week). Students will also have the opportunity to look at the book they read the day before. The idea is that they are generating support for their answer to the question: What makes a game popular?

Explain - *Students communicate what they have learned so far and figure out what it means. This phase also provides an opportunity for teachers to directly introduce a concept, process, or skill to guide students toward a deeper understanding.*

Students will move into the seating formation and be reminded once again of the expectations for the discussion. The teacher will facilitate by asking the question: What makes a board game popular?

Elaborate —*Allow students to use their new knowledge and continue to explore its implications. At this stage students expand on the concepts they have learned, make connections to other related concepts, and apply their understandings to the world around them in new ways*

Students will now switch spots and continue the discussion.

Evaluate: *This phase assesses both learning and teaching and can use a wide variety of informal and formal assessment strategies.*

The teacher and students will come back together as one group and verbally reflect on what went well and what could be improved on. The teacher will ask the students the essential question which will, hopefully, elicit responses about how investigating the various board games will inform their creation of their own fun board game!

If time remains, students will be given an opportunity to work with their group/partner to start the planning process for their board game.

TEACHER NAME		Lesson #
Katie Yunker		4
MODEL	CONTENT AREA	GRADE LEVEL
Problem Based	STEM	3-5
CONCEPTUAL LENS		LESSON TOPIC
Investigation		board games
LEARNING OBJECTIVES <i>(from State/Local Curriculum)</i>		
3-5-ETS1-2.	Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.	
3-5-ETS1-3.	Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.	
THE ESSENTIAL UNDERSTANDING <i>(What is the overarching idea students will understand as a result of this lesson?)</i>		THE ESSENTIAL QUESTION <i>(What question will be asked to lead students to “uncover” the Essential Understanding)</i>
<i>Investigation informs creation.</i>		<i>How does investigation inform creation?</i>
CONTENT KNOWLEDGE <i>(What factual information will students learn in this lesson?)</i>		PROCESS SKILLS <i>(What will students be able to do as a result of this lesson?)</i>
Students will learn: - strengths and weaknesses of various game designs. - the process for creating a board game.		Students will be able to: - articulate ideas about board game strategies to their group. - answer questions about their board game. - create their own board game.

GUIDING QUESTIONS

*What questions will be asked to support instruction?
Include both “lesson plan level” questions as well as questions designed to guide students to the essential understanding*

Pre-Lesson Questions:	During Lesson Questions:	Post Lesson Questions:
	• What are your games rules? • How long does one game last? • How are you delegating tasks and responsibilities in order to get everything finished on time? • What “type” of game are you creating (skill, strategy, luck)? • If your game is strategy or skill, what strategy or skill is essential to win? • What game that we played this week is most like your game? • What is the goal of your game? • How did this week’s investigations aid in the creation of your board game? • What investigation was most beneficial to your group?	• How did the various investigations this week inform the creation of your game? • What was the most fun part of this week? • What is one thing you would change about this week? • How can you improve your current game even more? • What is the most important thing that you learned this week? • How will you decide who takes the game home?

DIFFERENTIATION

(Describe how the planned learning experience has been modified to meet the needs of gifted learners. Note: Modifications may be in one or more of the areas below. Only provide details for the area(s) that have been differentiated for this lesson.

Content	Process	Product	Learning Environment
	Students will be working with	There are infinite different possible	

	various materials and most likely have to creatively repurpose objects. The PBL design ensures that student creation can take on many different forms.	games to make.	
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PLANNED LEARNING EXPERIENCES

(What will the teacher input? What will the students be asked to do? For clarity, please provide detailed instructions)

Engage and Connect - *This phase focuses on piquing students' interest and helping them access prior knowledge. This is the introduction to the lesson that motivates or hooks the students*

Students will enter the room and see lots of game materials around the room. Teacher will let them know that today will be the day they will build their games! The teacher will review the Performance Task and informally touch on each of the GRASPS components. (Introduced and briefly discussed on Monday.)

Explore - *In this phase, the students have experiences with the concepts and ideas of the lesson. Students are encouraged to work together without direct instruction from the teacher. The teacher acts as a facilitator. Students observe, question, and investigate the concepts to develop fundamental awareness of the nature of the materials and ideas.*

Explain - *Students communicate what they have learned so far and figure out what it means. This phase also provides an opportunity for teachers to directly introduce a concept, process, or skill to guide students toward a deeper understanding.*

Students will get into their groups and begin building their game. The teacher will be constantly moving from group to group providing assistance, giving suggestions, etc.

Elaborate –*Allow students to use their new knowledge and continue to explore its implications. At this stage students expand on the concepts they have learned, make connections to other related concepts, and apply their understandings to the world around them in new ways*

Students will be given an opportunity to play various games (including their own).

Students will be given another copy of the SCAMPER note catcher to use when looking critically at the games. The idea is not that students would “evaluate” the other games but, provide feedback for ways to improve the game. Discussions about the games can continue as a whole class or in smaller groups (depending on who is finished.)

Evaluate: *This phase assesses both learning and teaching and can use a wide variety of informal and formal assessment strategies.*

The teacher will close the camp week by asking students to verbally reflect on the week using the “After Lesson Questions” with a focus on the first question that really fleshes out HOW investigating games and game makers led them to creating a game of their own.

Unit Resources

Books

Anderson, K., & Foley, T. (2016). *Who was Milton Bradley?* New York: Grosset & Dunlap, an imprint of Penguin Random House.

Games

***The following list includes the games used in this unit but, for the most part, you can substitute similar games, depending on your availability. Keep in mind, this list of games was created very intentionally in order to include games of varying skill and strategy.*

Clue

Boggle

Scrabble

Battleship

Jenga

Life

Trouble

Yahtzee

Sorry

Candy Land

Chutes and Ladders

Connect Four

Other Resources (attached)

- Google Slides Presentation
- Socratic Seminar handout
- Gameplay note catcher
- SCAMPER note catcher
- Performance Task Rubric

Game:

Goal

Type

Strengths

Limitations

Other Ideas

Performance Task Rubric

	Exceeds Expectations 3	Meets Expectations 2	Does Not Meet Expectations 0
Game Planning	Meets Expectations and: _____ game plans incorporate elements of higher-level thinking	_____ game plans indicate revisions _____ game plans are clear drafts of final game (no major changes appear in the final game)	_____ only one plan is submitted _____ final game is significantly different than plans
Rules	Meets Expectations and: _____ includes alternate ways to play and/or modify the game _____ provides diagrams and/or possible scenarios to further clarify rules	_____ clear and easy to understand _____ include and explanation of all typical situations in the game _____ easy to read or typed	_____ unclear and/or hard to understand _____ do not explain certain situations common in the game _____ messily written and/or hard to read
Presentation	Meets Expectations and: _____ bonus pieces are included for game modification	_____ colorful and engaging _____ game pieces are included and functional _____ all writing/symbols are easy to read	_____ not colorful or engaging _____ game pieces are missing or not sufficient for gameplay _____ portions of the game are hard to read or figure out
Age Accessibility	Meets Expectations and: _____ can be modified for different aged players	_____ appropriate for students in 3rd-5th grade _____ challenging enough to be engaging	_____ too simple or too difficult for students in 3rd-5th grade _____ not engaging for most players

Socratic Seminar Note Catcher

Your Name: _____ Your Partner's Name: _____

Tally the number of times your partner spoke:

List 3 specific questions your partner asked:

List 3 ideas or questions that you had while observing this discussion:

SCAMPER Note Catcher

	S	C	A	M	P	E	R

WELCOME TO BOARD GAMES!

PLEASE, COME IN AND...

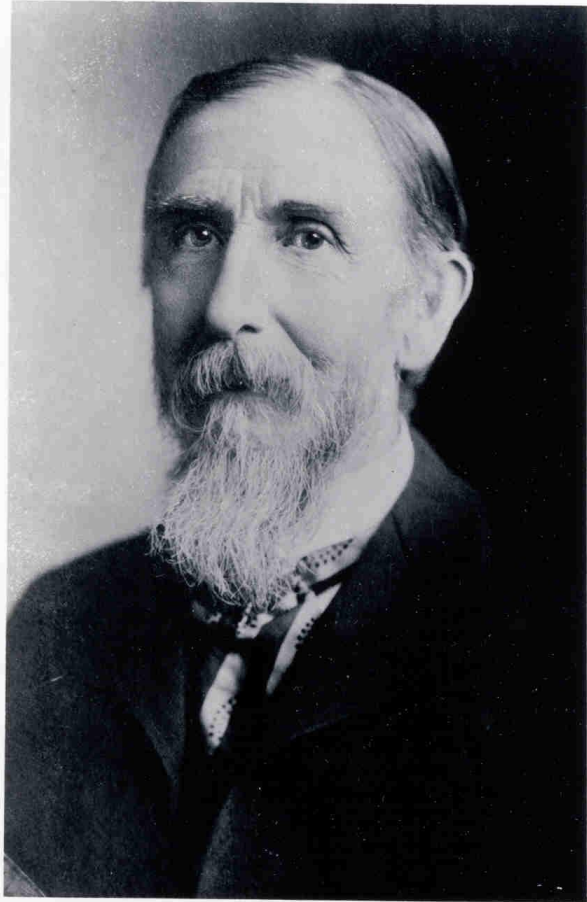
1. TAKE AN INDEX CARD AND WRITE DOWN THE NAMES OF SOME BOARD GAMES THAT YOU HAVE PLAYED BEFORE AND YOU FEEL LIKE YOU KNOW WELL.
2. MOVE AROUND THE ROOM AND INTRODUCE YOURSELF TO OTHER STUDENTS. SHARE THE GAMES YOU WROTE DOWN WITH EACH OTHER.
3. DISCUSS WITH YOUR PARTNER WHAT TYPE OF GAMES YOU LIKE BEST!

As a popular board game designer this week, your task is to create the next new board game that all the kids your age are just itching to play.

You will thoroughly investigate strategy, design, rules, and more in order to inform this board game creation. One day, you will even step into the shoes of one of the most famous game makers! Working together with your group, you will plan, design, build, and test an amazing new board game that kids just like you won't be able to quit playing. Your game will be complete with a set of rules, a game board, and a clear path to victory! At the end of the week, you will have a chance to play other games and provide feedback to your peers on how to make their games better. Likewise, your peers will also assist you in making your game the best that it can be.

This journey will require patience, perseverance, and creativity along with a lot of determination and I know you are up for the challenge!

- What strategies work best to help someone win this game?
- What is the “goal” of this game?
- How does the goal of the game relate to the gameplay?
- What are the drawbacks of this game?
- What is the most exciting part of this game?
- How do the rules of game ensure fairness?
- What skills are required to be successful in this game?
- What makes this game exciting, addicting, challenging, engaging?
- How would you improve this game?
- What are the most important investigation revelations?

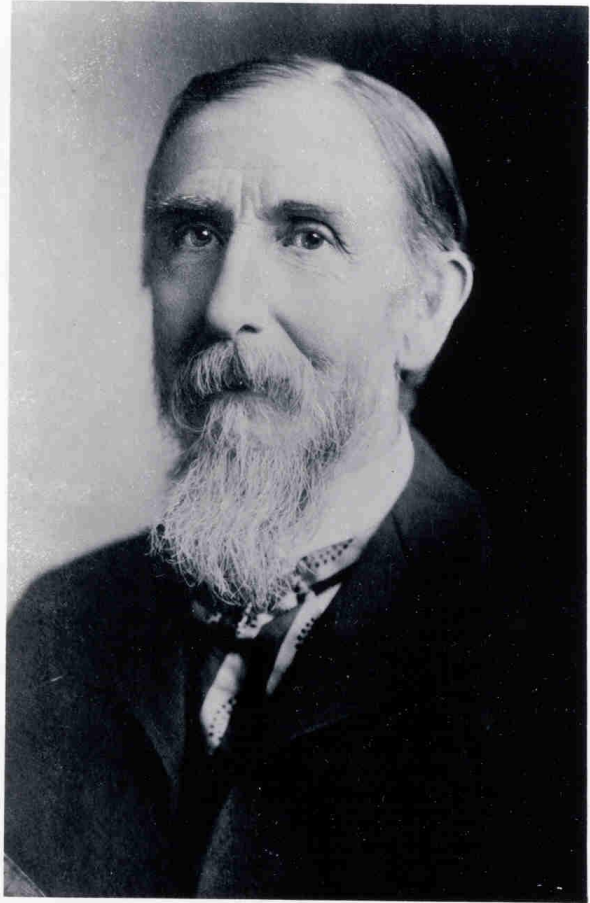


WHO IS
THIS?

Discuss with a friend!

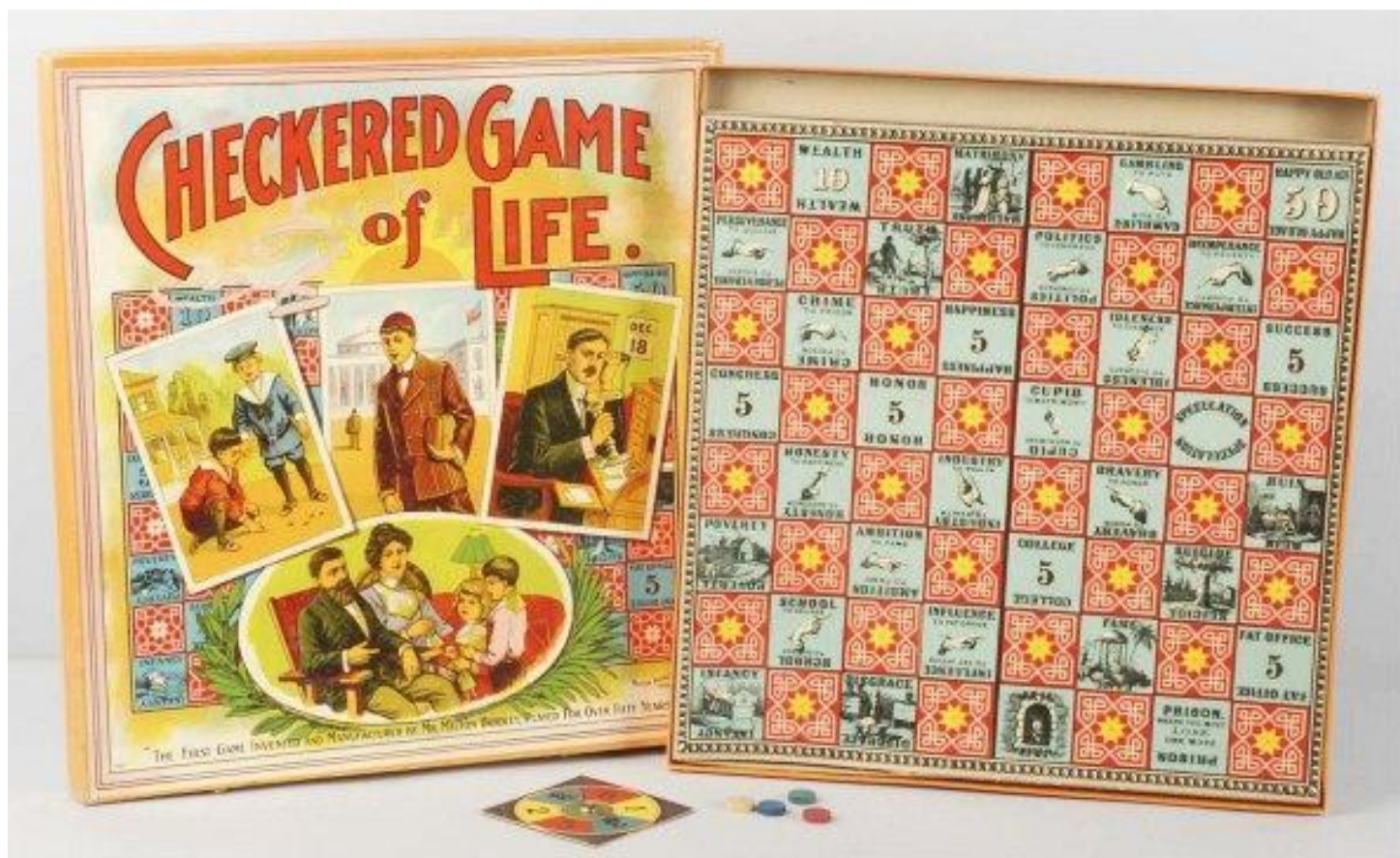
HINT:





MILTON BRADLEY (NOVEMBER 8,
1836 – MAY 30, 1911) WAS AN
AMERICAN BUSINESSMAN,
GAME PIONEER AND PUBLISHER,
CREDITED BY MANY WITH
LAUNCHING THE BOARD GAME
INDUSTRY, WITH THE MILTON
BRADLEY COMPANY.







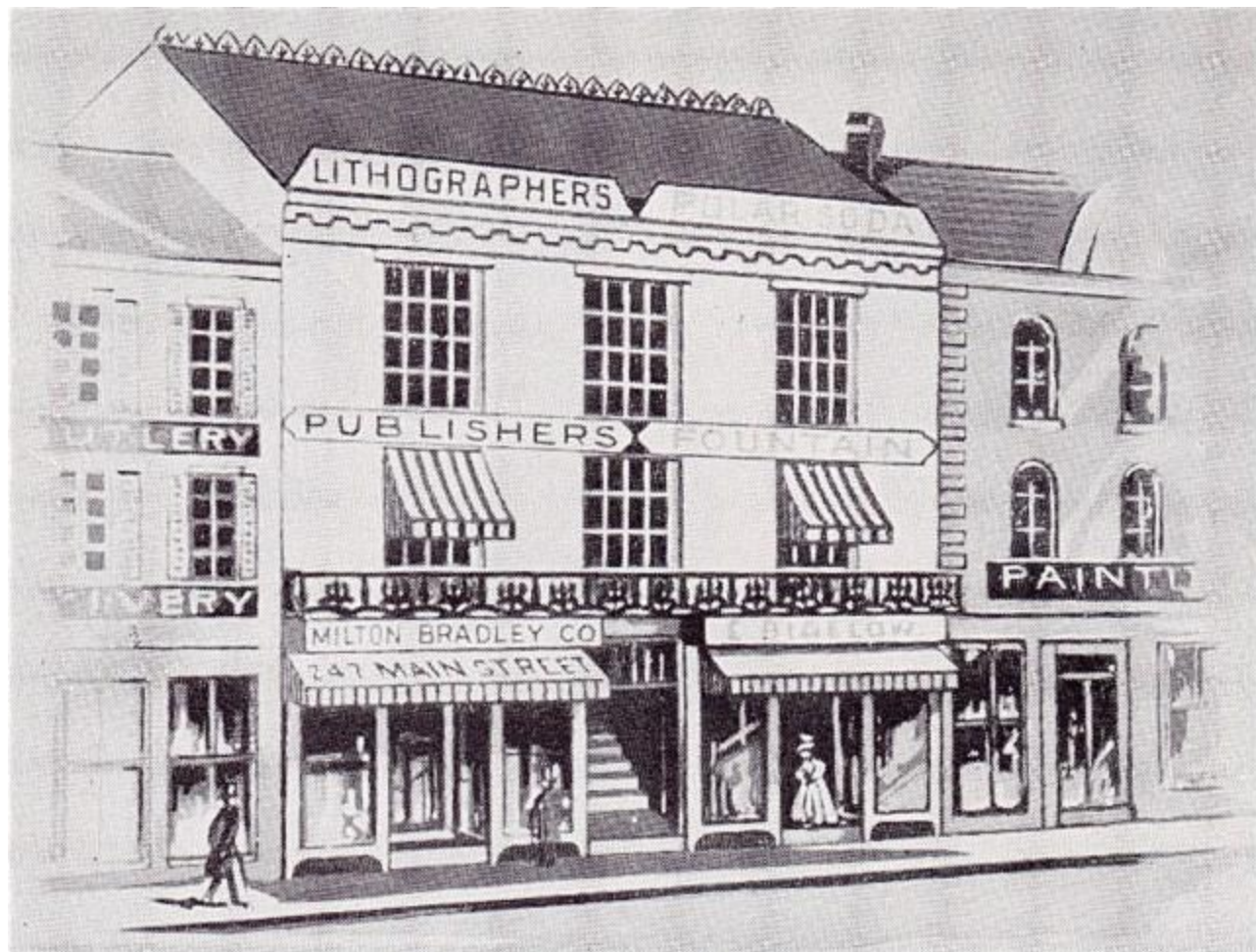


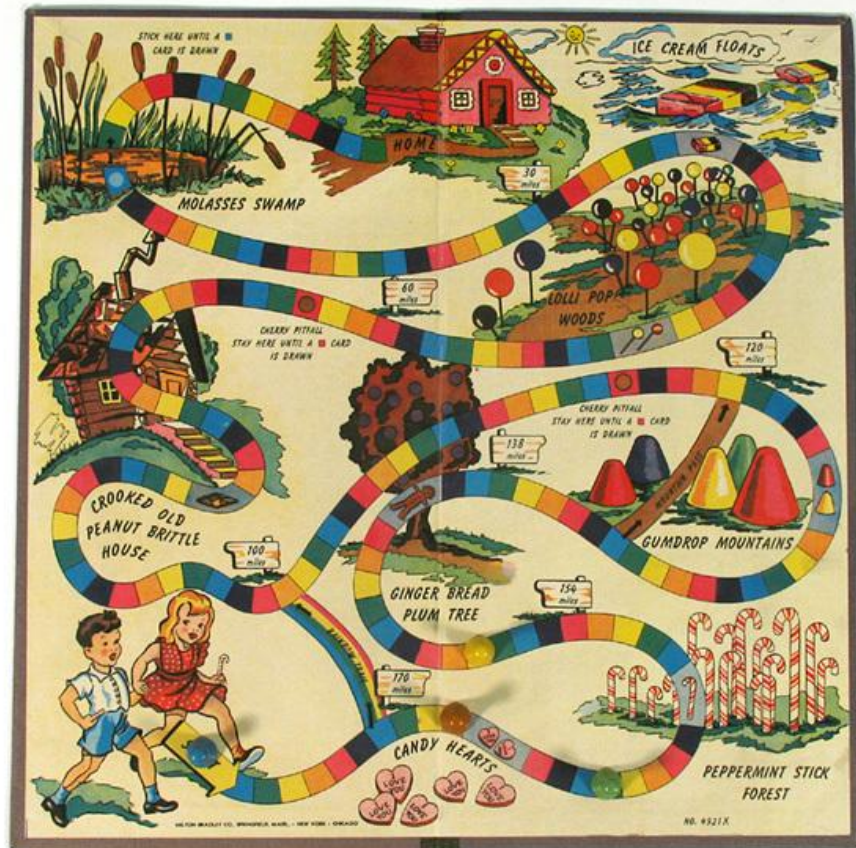
PATENTED

MARCH 30TH 1866.

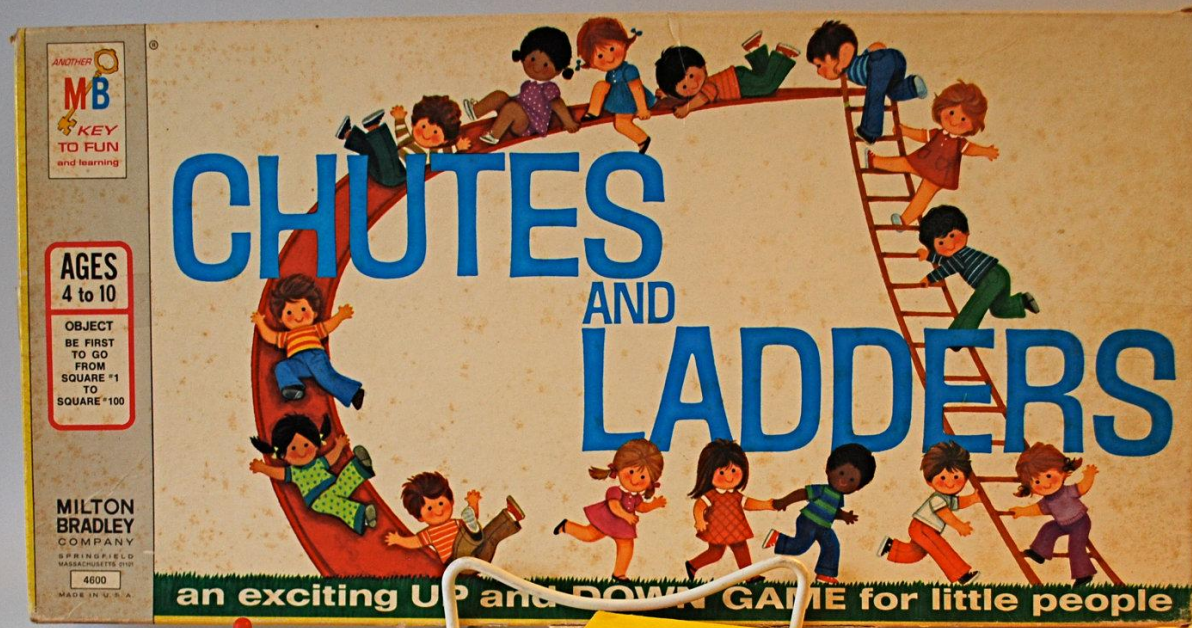
WEALTH. 10 WEALTH.		MATRIMONY.  MATRIMONY.		GAMBLING TO RUIN  TO RUIN GAMBLING	
	TRUTH.  TRUTH.		POLITICS TO CONGRESS.  TO CONGRESS. POLITICS		INTEMPERANCE TO POVERTY  TO POVERTY INTEMPERANCE
CRIME TO PRISON.  TO PRISON. CRIME		HAPPINESS. 5 HAPPINESS.		IDLENESS TO DISGRACE.  TO DISGRACE. IDLENESS	
	HONOR. 5 HONOR.		CUPID TO MATRIMONY.  TO MATRIMONY. CUPID		GOVERNMENT CONTRACT TO WEALTH.  TO WEALTH. GOVERNMENT

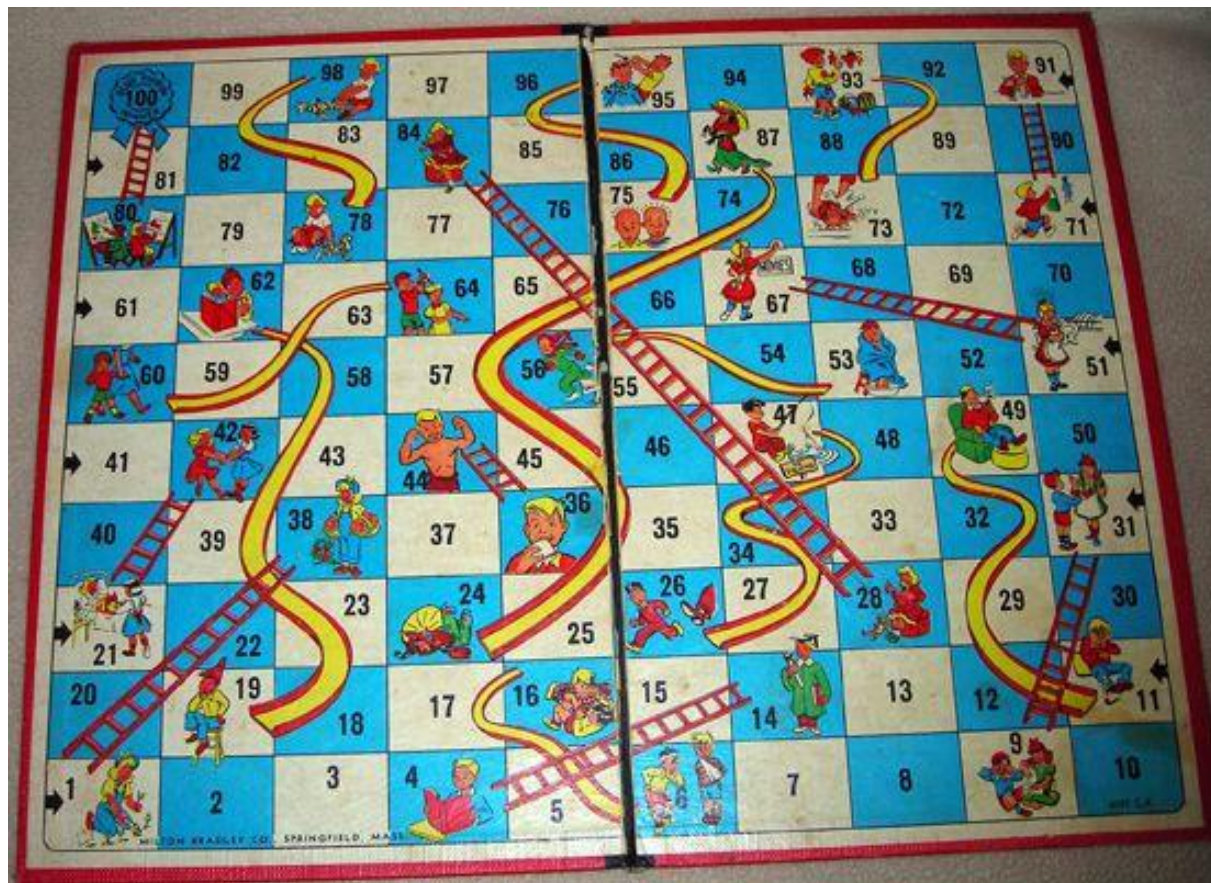




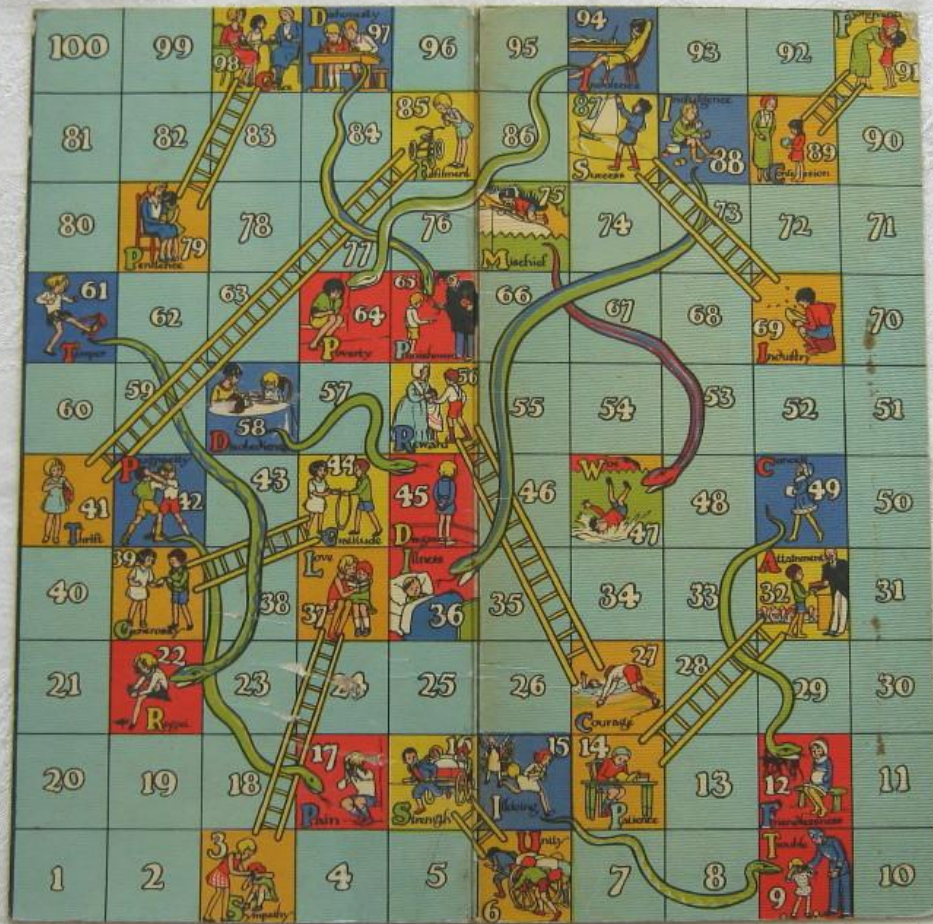


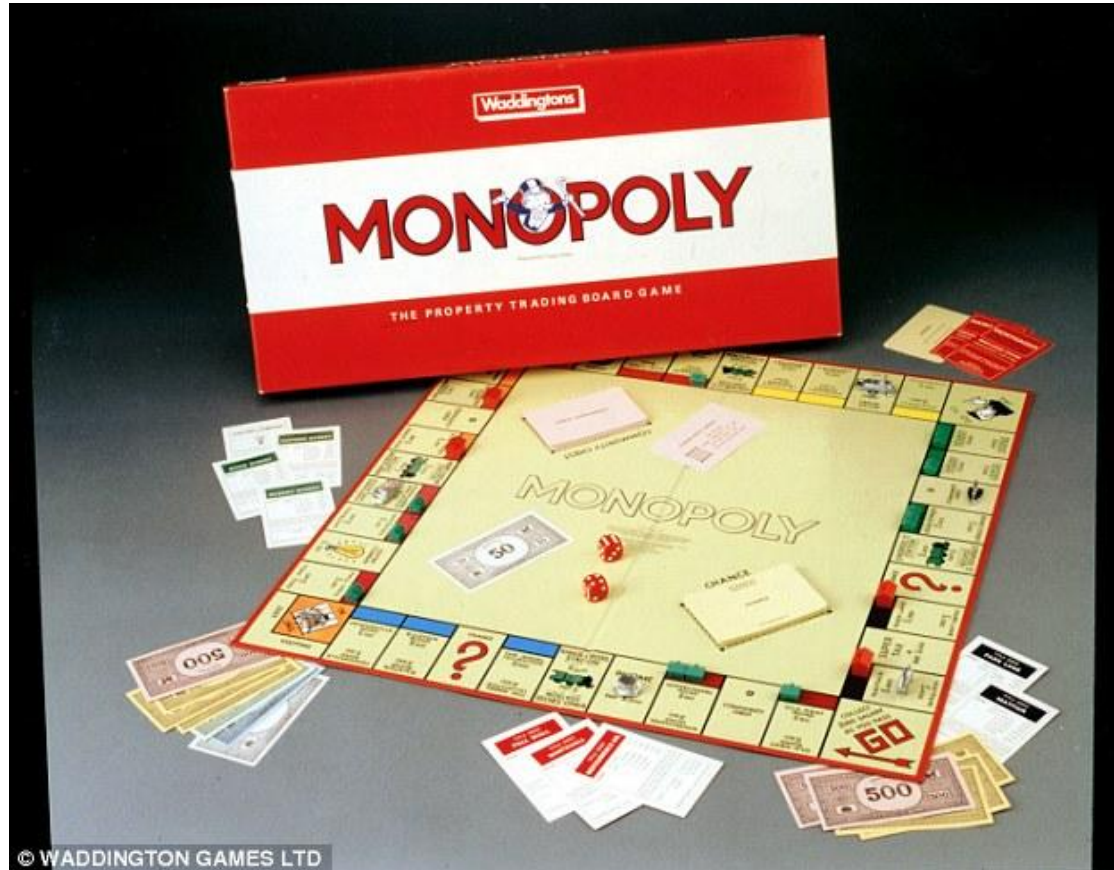


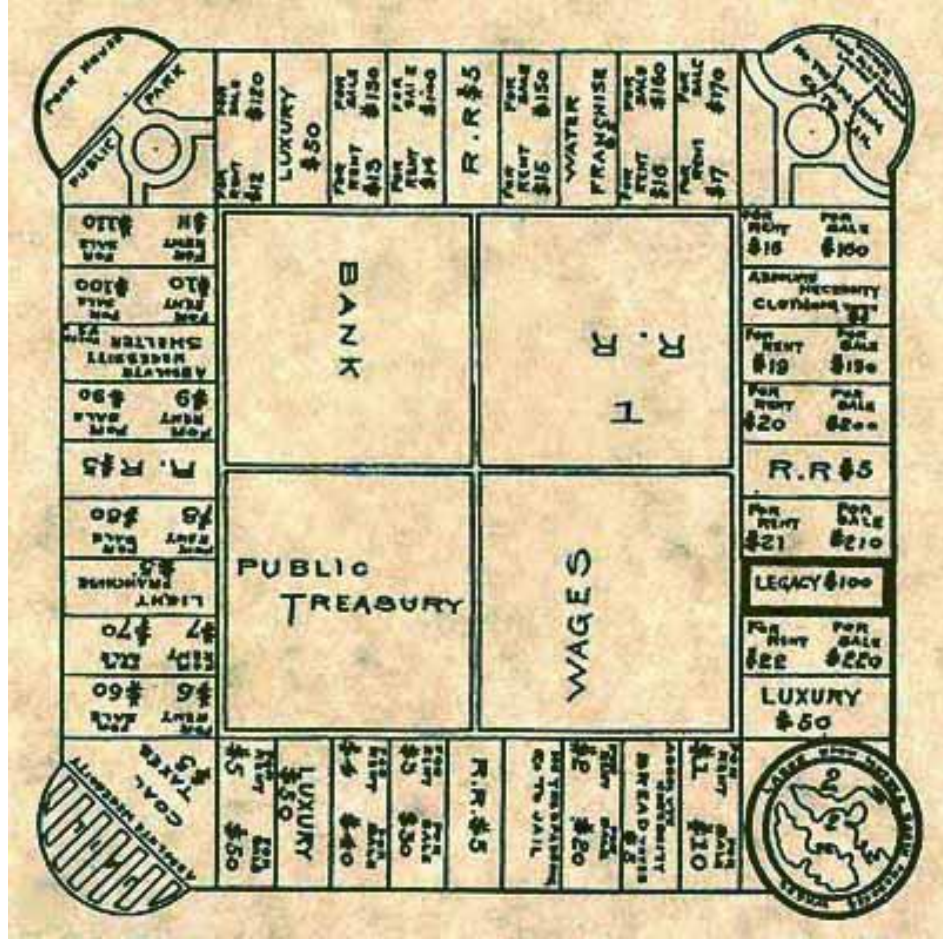












GO TO JAIL
NO TRESPASSING
LORD BLUEB'S ESTATE

BOOMTOWN
RENT \$6 C

GOAT ALLEY
RENT \$8 C

SOAKUM
RENT \$8 C

LIGHTING SYSTEM
GAS \$5

BEGGARMAN'S COURT
RENT \$8 C

SHOOTING STAR R.R.
FARE \$5 N

RICHETY ROW
RENT \$10 D

ABSOLUTE NECESSITY
GAS \$5

FOOD
FARE \$10

MARKET PLACE
RENT \$10 D

COTTAGE TERRACE
RENT \$12 D

POORHOUSE
CENTRAL PARK
FREE

RUBENVILLE
RENT \$6 B

SPECULATION
RENT \$10

THE FARM
RENT \$4 B

THE PIKE
RENT \$4 B

ROYAL RUSHER R.R.
FARE \$5 N

NO TRESPASSING
GO TO JAIL

LONELY LANE
RENT \$2 A

ABSOLUTE NECESSITY
FUEL
RENT \$10

WAYBACK
RENT \$25 A

START HERE
COLLECT YOUR WAGES

MOTHER EARTH
\$100

LUXURY \$75

WALL STREET
RENT \$22 H

CHANCE

GRAND BOULEVARD
RENT \$22 H

P. D. Q. R. R.
FARE \$5 N

FIFTH AVENUE
RENT \$20 G

MADISON SQUARE
RENT \$20 G

ABSOLUTE NECESSITY
CLOTHING
RENT \$10 TAXES

BROADWAY
RENT \$18 G

THE BOWERY
RENT \$18 F

JOHNSON CIRCLE
RENT \$16 F

SLAMBANG TROLLEY
FARE \$5 M

FAIRHOPE AVENUE
RENT \$16 F

CEE WHIZ R. R.
FARE \$5 N

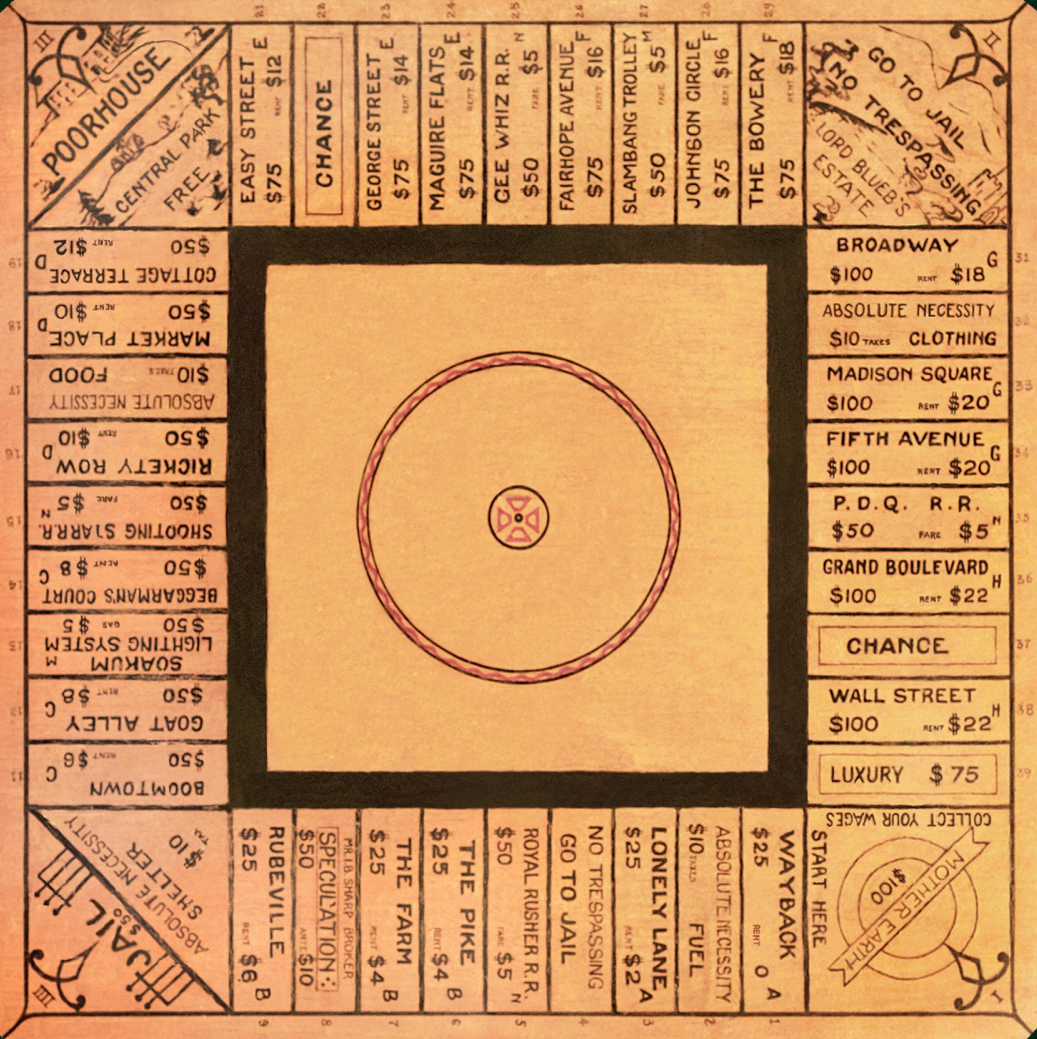
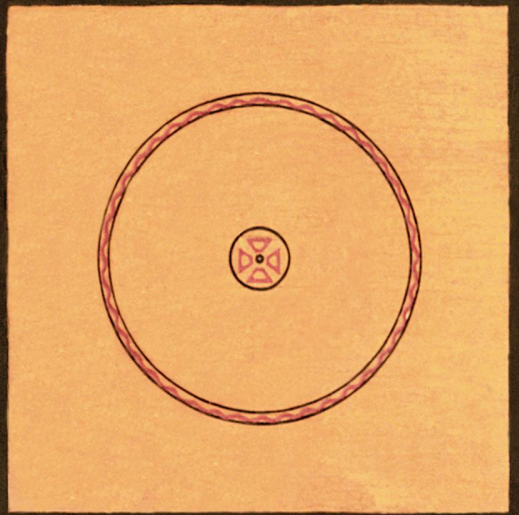
MAGUIRE FLATS
RENT \$14 E

GEORGE STREET
RENT \$14 E

CHANCE

EASY STREET
RENT \$12 E

POORHOUSE
CENTRAL PARK
FREE



SCAMPER

SCAMPER IS A CRITICAL THINKING TECHNIQUE THAT
HELPS SOLVE PROBLEMS OR IGNITE CREATIVITY WHEN YOU
ARE BRAINSTORMING.

.....

(SCAMPER IS THE ACRONYM FOR THE SEVEN TECHNIQUES.)



SUBSTITUTE

- WHAT MATERIALS CAN YOU SUBSTITUTE OR SWAP TO IMPROVE THIS GAME?
- WHAT OTHER RULES COULD BE INTRODUCED?

COMBINE

- CAN YOU COMBINE GOALS IN THE GAME?
- WHAT OTHER GAMES CAN BE COMBINED WITH THIS GAME?
- ARE THERE ANY RULES THAT CAN BE COMBINED?

ADAPT

- WHAT OTHER GAMES ARE LIKE THIS GAME?
- WHAT IS ONE THING YOU CAN CHANGE TO AFFECT THE GOAL OF THE GAME?
- HOW CAN YOU MAKE THE GAME SHORTER OR LONGER?

MODIFY

- HOW COULD YOU CHANGE THE GAME BOARD?
- WHAT ELEMENT OF THE GAME CAN BE STRENGTHENED TO CHANGE THE GAME PLAY?

PUT TO ANOTHER USE

- HOW COULD YOU USE THIS GAME WITH YOUNGER CHILDREN?
- WHAT IS ANOTHER, UNRELATED, WAY YOU CAN USE THE PIECES OF THIS GAME?

ELIMINATE

- WHICH RULES OR PIECES COULD BE ELIMINATED?
- WHAT IS ANOTHER, UNRELATED, WAY YOU CAN USE THE PIECES OF THIS GAME?

REVERSE

- WHAT WOULD HAPPEN IF THERE WAS NO ORDER TO THE STEPS OF HOW TO PLAY THE GAME?
- WHAT ROLES COULD BE SWITCHED OR REVERSED?

Substitute

- What materials can you substitute or swap to improve this game?
- What other rules could be introduced?

Combine

- Can you combine goals in the game?
- What other games can be combined with this game?
- Are there any rules that can be combined?

Adapt

- What other games are like this game?
- What is one thing you can change to affect the goal of the game?
- How can you make the game shorter or longer?

Modify

- How could you change the game board?
- What element of the game can be strengthened to change the game play?

Put to Another Use

- How could you use this game with younger children?
- What is another, unrelated, way you can use the pieces of this game?

Eliminate

- Which rules or pieces could be eliminated?
- What is another, unrelated, way you can use the pieces of this game?

Reverse

- Which rules or pieces could be eliminated?
- What is another, unrelated, way you can use the pieces of this game?

NOW WE WILL BE PARTICIPATING IN A SOCRATIC
SEMINAR TO DISCUSS ONE IMPORTANT QUESTION.

WHAT DO YOU THINK THE QUESTION WILL BE?

BEFORE I TELL YOU, LET'S TALK
ABOUT THE DIFFERENCE BETWEEN
A DEBATE AND DIALOGUE.

WHAT MAKES A BOARD
GAME SO POPULAR?

OTHER QUESTIONS TO DISCUSS...

- HOW CAN STRATEGIES AFFECT A GAME'S POPULARITY?
- DO BOARD GAMES TEACH ANY SKILLS?
- CAN GAMES HAVE MORE THAN ONE STRATEGY? GIVE AN EXAMPLE.
- CAN STRATEGY EVER BE USED IN LUCK-BASED GAMES?
- WHAT IS A GAME STRATEGY THAT YOU USE?
- THINK OF THE GAMES WE HAVE PLAYED. WHAT STRATEGIES DID YOU LEARN OR REALIZE THAT YOU MIGHT NOT HAVE KNOWN BEFORE?