



Watch Out for Sharks!

Draft a Business Plan Using Shark Tank



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Grade Level	10th – 12th Grade	Time Frame	255 - 340 minutes
Subject	Mathematics	Duration	6-8 class periods
Course	Math of Finance		

Essential Question

What is necessary to develop a business plan?

Summary

In this lesson, students will watch and reflect on Shark Tank pitches before brainstorming business ideas with the class. After learning about the basic components of a business plan, groups will develop a business plan specific to the product they brainstormed. As a culmination to the project, groups will either pitch their ideas to a panel of classroom guests like Shark Tank contestants or watch a video of entrepreneur Mark Cuban describe how he succeeded in business.

Snapshot

Engage, Part 1

Students learn about *Shark Tank*-style product pitches by watching clips from the show and evaluating them through a reflection handout.

Explore

Students brainstorm a product or service by doing a Collective Brain Dump and business brainstorming in groups.

Engage, Part 2

Working in groups, students vet product and business ideas and decide how they will move forward with the idea or instead brainstorm some more.

Explain

Students learn more about the concept of a business plan by defining it, looking at successful and failed products, and explaining why a business plan is a crucial step for successful products and services.

Extend

Groups use provided resources to collaboratively create an outline and write a business plan.

(Optional) Explain A

Individual students watch a *Shark Tank* product pitch and grade the performance through a provided rubric.

(Optional) Extend A

Students participate in a whole-class discussion on the grades the pitch received based on the rubric.

(Optional) Evaluate A

Groups pitch their products to a group of classroom guests and ask for an investment for their company.

(Optional) Evaluate B

Students watch an ICAP video highlighting the career of an entrepreneur, connecting what they've learned during this project to the career skills they would need as entrepreneurs.

Attachments

- [Asset and Liability Decks—Watch Out for Sharks!.pdf](#)
- [Business Plan Expectations—Watch Out for Sharks!.pdf](#)
- [Business Plan Outline \(Black and White\)—Watch Out for Sharks!.pdf](#)
- [Business Plan Outline \(Color\)—Watch Out for Sharks!.pdf](#)
- [Company Brainstorming Teacher Resource—Watch Out for Sharks!.docx](#)
- [Company Brainstorming Teacher Resource—Watch Out for Sharks!.pdf](#)
- [Company Brainstorming—Watch Out for Sharks!.docx](#)
- [Company Brainstorming—Watch Out for Sharks!.pdf](#)
- [Industry Deck—Watch Out for Sharks!.pdf](#)
- [Lesson Slides—Watch Out for Sharks!.pptx](#)
- [Pitch Reflection—Watch Out for Sharks!.docx](#)
- [Pitch Reflection—Watch Out for Sharks!.pdf](#)
- [Presentation Rubric—Watch Out for Sharks!.docx](#)
- [Presentation Rubric—Watch Out for Sharks!.pdf](#)
- [Presentation Template—Watch Out for Sharks!.pptx](#)
- [Resource Library—Watch Out for Sharks!.pdf](#)

Materials

- Lesson Slides (attached)
- Pitch Reflection (attached; one per student)
- Company Brainstorming (attached; one per group)
- Company Brainstorming Teacher Resource (attached)
- Business Plan Outline (Black & White) or Business Plan Outline (Color) (attached; one per group)
- Business Plan Expectations (attached; one per group)
- Resource Library (optional to print; attached; one per group)
- Asset and Liability Decks (attached)
- Industry Deck (optional; attached)
- Blank posterboard or chart paper (three total)
- Presentation Rubric (attached; two per student; optionally, one per shark)
- Presentation Template (Optional; attached)
- Sticky notes (three per student)
- Writing utensils
- Student devices capable of creating presentations
- Classroom device capable of projecting presentations

40 minutes

Engage, Part 1

Teacher's Note: Before the Lesson

This lesson involves a lot of group work. Students will work in groups to create artifacts from scratch throughout the lesson. Each class period may take a different amount of time. Although work time is built in, you should adjust the times provided here to accommodate the needs of students.

Optional: Preparing with Shark Tank

The purpose of this Engage activity is to encourage students to begin thinking about products that could become businesses, how a product serves a purpose to customers, and what a proficient business pitch could look like. Depending on the length of your class, determine how many of the three videos you will show to the class. Only one video is necessary to establish the purpose of the lesson. However, the additional videos will serve as varied examples of what is possible. If there is time to watch only one video, we recommend the video on slide 5 about Scrub Daddy.

- Video 1 ([Scrub Daddy](#)) is 12 minutes long.
- Video 2 ([Haven](#)) is 9 minutes long.
- Video 3 ([Ionic Ear](#)) is 4 minutes long.

If you do not intend to emphasize the investment and negotiations in the lesson, consider stopping the videos after the pitch has ended and the negotiations with the panel of sharks have started.

Use the attached **Lesson Slides** to facilitate the lesson.

Start by showing **slide 2**. Introduce the lesson before transitioning through **slides 3-4** to discuss the essential question and learning objectives.

Pass out a copy of the attached **Pitch Reflection** handout to each student and introduce the activity. Explain to the students that they will watch real business pitches from a popular show called Shark Tank to better understand what kinds of products and businesses entrepreneurs develop to make money. While watching the example pitches, they should answer the reflection questions listed on their handout.

Move through **slides 5-7** and play each video while students reflect on their own paper. Between videos, consider asking students the questions on the handout and facilitating a whole-class discussion.

- Slide 5 links the video pitch for Scrub Daddy: [A Bidding War Breaks Out During Scrub Daddy's Pitch](#)
- Slide 6 links the video pitch for Haven: [The "Best Pitch Ever!" On Shark Tank With Haven](#)
- Slide 7 links the video pitch for Ionic Ear: [Shark Tank Worst Pitch Ever #1 Ionic Ear](#)

45 minutes

Explore

Teacher's Note: Preparing the Lesson

Before the lesson begins, hang three posters on the walls of your classroom with the following headings:

1. A problem in your community
2. A situation that can be made easier
3. Something that can make a lot of money

After engaging students with Shark Tank pitches, move to **slide 8** and introduce the [Collective Brain Dump](#) strategy. Give each student three sticky notes. Show students the prompts on the slide and ask them to write an idea for each prompt, with one idea per sticky note:

- Sticky note 1: A problem that you see in your community.
- Sticky note 2: A situation people encounter that can be made easier with an invention.
- Sticky note 3: An idea that can make a lot of money.

Allow students time to brainstorm and write their responses on the sticky note before placing their responses on the corresponding poster hanging on the wall.

Facilitating the Discussion

Remind students that their responses and ideas moving forward must be legal enterprises in their state and country.

Once all students have responded and placed their responses on the posters, split the class into groups of four and transition to **slide 9**. Explain the [Gallery Walk](#) strategy by informing each group that they will be reading every response on the posters. Have students work with their group members to do so. Then direct groups to pick their favorite idea from each poster to take back and help them brainstorm. Depending on the number of groups, there may be more than one group at a poster, so individuals will need to be aware of the people around them to allow everyone a chance to see the responses.

Facilitating the Lesson

Consider numbering groups off from 1-3 to correspond with the numbers on the posters. Set a timer in the classroom and give each group five minutes per poster to choose their favorite sticky note. Repeat this process three times.

Once each group has had the opportunity to pick three sticky notes (one from each poster), send them back to sit with their groups and pass out one copy of the attached **Company Brainstorming** handout per group. Move to **slide 10** and instruct groups to place their collected sticky notes in the corresponding box on each page and work together to answer the prompts provided. After the groups have considered the potential of each idea, they should synthesize the information from two ideas to create their product and business moving forward. For example, they could combine their problem and an idea that could make money, or their situation and an idea that could make money.

Allow groups the remainder of the class time to vet their ideas and come to a consensus on the product or service they will use moving forward. If a group comes to an impasse, they may choose to go back to the posters to choose a different sticky note before completing the same reflection questions that are on the handout.

As students work in groups, float around the room to answer questions and keep groups on task. Use the attached **Company Brainstorming Teacher Resource** as an exemplar to guide groups.

Optional: Industry Deck

If groups have a difficult time coming to a consensus on the company or product, print and prepare the attached **Industry Deck**. Offer to let each group draw one card. Whatever industry they draw from the deck will be the decided direction of the company. This should allow groups to move forward.

Teacher's Note: Company Brainstorming

Ask groups to keep their **Company Brainstorming** documents in a safe place for use in the next couple of days, or establish a classroom procedure to turn in their work.

30 minutes

Engage, Part 2

Students should continue sitting with their same group members moving forward. Show **slide 11** and instruct groups to share their company product or service idea that was brainstormed the day before with the entire class.

After each group has shared their idea, provide time for the class to ask any clarifying questions about the business. Use the questions posted on the slide if the class does not have any questions.

Teacher's Note: Guiding the Lesson

If you feel that groups would benefit from additional reflection to narrow the scope of their product/idea, consider the following questions:

- How will you help your idea come to life? Will you build on something existing or create something totally new?
- What resources will be needed to get started?

If groups cannot successfully answer the posted questions, encourage that group to go back to the brainstorming phase to create a different company idea. After this point in the lesson, it is not advised for groups to change their company or product ideas.

35 minutes

Explain

Transition to **slide 12** and introduce the term "mathematical models" as an equation or calculation used by businesses to project and calculate aspects of their business. Examples of mathematical models in business include product markup and budget. These models are used to ensure that businesses are not losing money while running the business.

Move to **slide 13** and introduce the [Elbow Partner](#) strategy. Ask students to turn to their neighbors and discuss what they think would be the most important model for a successful business. After the partners have had some time to discuss, conduct a whole class discussion by asking pairs to share their opinion and why they chose that model.

After the discussion, move to **slide 14** and define a business plan and its purpose. Move through **slides 15-18** to compare failed and successful businesses. Emphasize the steps taken that contributed to the success or failure of the business.

On **slide 19**, review with the class the benefits of a well-developed business plan and use **slide 20** to introduce the essential components of the business plan that each group will be developing. Go into as much or as little detail about the contents of each component as you see fit. Explain to students that they will use the components to create their own business plan based on the product or service their group chose.

70 minutes

Extend

Teacher's Note: Preparing the Lesson

Before this point in the lesson, print and cut out one copy of the attached **Asset and Liability Decks**. Separate these cards into their respective decks and place them in a designated place in the classroom for students to pick up.

Transition to **slide 21** and explain to students that they will draw from two decks of cards to establish two things about their company: their assets and liabilities. Ask one member from each group to come to a designated place in the classroom to collect their cards.

After each group has collected their cards, move to **slide 22** and pass out the **Business Plan Outline**. Explain to students that they will be using their **Company Brainstorming** document, the **Asset and Liability Decks**, and the **Resource Library** to fill in the entire outline. Once they complete the Business Plan Outline, transition to **slide 23** and explain to the groups that they will begin typing their business plan.

Pass out a copy of the **Business Plan Expectations**, one per group. This guide provides an example of a well-formatted business plan, as well as more information about what to include in the business plan. Encourage students to use the guide as they write their business plan, which will be turned in when completed.

Optional: Resource Library

Along with the **Business Plan Outline**, there is also a **Resource Library** attached in the lesson resources. Both of these resources will be valuable from this point forward in the lesson. Consider printing one copy of the Resource Library for each group or uploading the files digitally to the school's learning management system for students to reference.

20 minutes

Explain A

Teacher's Note: Wrapping the Lesson

Before this point in the lesson, decide how you would like to conclude.

- **Option A:** Students will turn in their business plan and pitch their company to the class and visitors. This will operate much like the *Shark Tank* clips above.
 - If choosing option A, unhide **slides 24-27** and continue through this **Explain A, Extend A, and Evaluate A**.
- **Option B:** Students will turn in their business plan and watch a video highlighting the career of an entrepreneur to connect this project to a career.
 - If choosing option B, unhide **slides 28-34** and skip down to **Evaluate B**.
- **Option C:** Students will turn in their business plan and pitch their company to the class and visitors. Then, students will *also* watch a video highlighting the career of an entrepreneur to connect this project to a career.
 - If choosing option C, unhide **slides 24-34** and continue through the entire lesson as posted (**Explain A, Extend A, Evaluate A, and Evaluate B**).

As students enter the classroom, have **slide 24** displayed for the students to see. Give each student a **Presentation Rubric** and a writing utensil. Ask students to take a few minutes to read through the rubric, focusing on the expectations and the requirements to score in a certain category.

Tell students that they will be watching a Shark Tank pitch. They will grade the pitch based on the rubric provided. Inform students that they can write on the rubric and take notes on what they see in the video.

Play the video for the class: ["It Only Holds Three Cans?" The Sharks Question Chill Systems](#). After playing the video through once, ask the class if they would like to watch the pitch again.

Once students have finished watching the pitch, ask them to take the time to grade the pitch based on the rubric. Only have them grade on what they witnessed from the video.

10 minutes

Extend A

Move to **slide 25** and have a group conversation about the Shark Tank pitch and presentation rubric. Use the following guiding questions:

- What grade did the Shark Tank Pitch receive?
- What went well?
- What could be improved?

Once the class has a good understanding of what their presentation should contain based on the rubric and video example, show **slide 26**. Ask groups to continue working on the business plan they began developing the previous day. When they're done with their business plans, explain that they will use this content as material for their pitch.

Optional: Presentation Template

Consider providing students with the attached **Presentation Template** to use as a template for their presentation.

At this point in the lesson, pause instruction and allow the class to work in groups during class time to complete their business plans and presentations. Provide as many workdays in class as necessary for groups to complete their tasks. Display **slide 26** during these workdays.

90 minutes

Evaluate A

Teacher's Note: Preparing the lesson

Before the group presentations, invite a panel of adults to the classroom. This might mean inviting faculty and staff in the district or community leaders. Instruct the classroom guests to play the role of the "Shark." This panel of sharks should rank the group presentations in two categories: best presentation and best idea. Determine whether prizes will be awarded to the highest performing groups.

Teacher's Note: Preparing the Lesson

Create an assignment on your school's Learning Management System for groups to turn in their presentation and business plan.

As students enter the classroom, display **slide 27** and ask them to sit with their groups. As students and visitors settle in, remind groups that their presentation and business plan need to be turned into the teacher. If the groups have not done this, now is the time.

Once class has started, let students know that they will be presenting their businesses to the class and the sharks (visitors). Introduce your visitors to the class and let the students know that the visitors will be ranking the best ideas and presentations in the class.

Help students facilitate their pitches by displaying their presentations for everyone in the class to see. Have both visitors and non-presenting students grade each presentation as it happens with the same Presentation Rubric used earlier in the lesson.

Continue this process until every group has presented.

35 minutes

Evaluate B

Teacher's Note: Preparing the Lesson

Before the following activity, decide how students will share their memes during the Evaluate 2 activity. Consider creating a discussion board or assignment on your school's learning management system, creating a [Padlet](#), or having students show the meme on their device.

At this point in the lesson, the groups will have completed and turned in their business plans. Display **slide 28** during working time as a written reminder of what students should be doing.

Once all groups have completed and turned in their business plan, display **slide 29** and introduce the [What Do You Meme?](#) strategy. Explain to the students that they will watch a video interview of entrepreneur Mark Cuban and reflect on the information they learn in the interview by creating a meme illustrating their reactions.

Move through **slides 30-34** and play the video [Mark Cuban On Becoming An Entrepreneur](#) or your choice of video clip(s) on the following slides.

Optional: Pacing the Lesson

Depending on the time restrictions of the class period, consider skipping **slide 30** and moving through **slides 31-34** to only show the most pertinent information.

After the video has played, transition to **slide 35**. Give the class an opportunity to create and share the memes they created in reaction to the video. Debrief those reactions with the class.

Resources

- Bloomberg Talk. (2022, April 20). Mark Cuban on becoming an entrepreneur: How I got here with Chris Paul. [Video]. YouTube. <https://youtu.be/B73ebBNrjmg>
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