Lesson 2: The Captain's Toolkit: Navigating Obstacles with a Growth Mindset

Note for Educator: This lesson is designed for learners aged 10-12 and builds directly on the "Captain of Your Ship" lesson. It assumes learners understand the core concepts of agency, being proactive (a Captain), and reactive (a Passenger).

Materials Needed:

- Whiteboard or large paper
- Markers
- "My Captain's Plan" worksheet from the previous lesson (for review)
- Building materials for a challenge (e.g., 20 strands of uncooked spaghetti, 1 yard of masking tape, 1 yard of string, 1 large marshmallow per learner/group)
- "Sudden Storm" cards (index cards with pre-written challenges)
- Worksheet: "The Captain's Log" (one for each learner)
- Pencils or pens

Learning Objectives:

Building on our understanding of agency, by the end of this lesson, you will be able to:

- Define "growth mindset" and "fixed mindset" and explain how they relate to being a Captain or a Passenger.
- Identify at least two specific problem-solving strategies for overcoming unexpected obstacles.
- Apply a growth mindset and problem-solving strategies to adapt a plan during a hands-on challenge.

I. Introduction (5-10 minutes)

Review & Bridge from Previous Lesson

Educator: "Last time, we learned about being the 'Captain of Your Ship.' Who can remind us what the difference is between a Captain and a Passenger?" (*Guide them to review proactive vs. reactive, taking initiative vs. waiting for things to happen*). "We also created a 'Captain's Plan' that included a section for 'Stormy Weather.' Today, we're going to sail right into one of those storms. Even the best captains face challenges they didn't plan for. The question isn't *if* you'll face a storm, but *how* you'll navigate it when you do."

Hook & Lesson Goal

Educator: "A captain's most important tool isn't the steering wheel or the map—it's their mindset. It's how they think when things go wrong. Today, we're going to build a mental 'Captain's Toolkit' that will help you handle any unexpected problem, whether it's in a school project, with friends, or while learning something new. By the end of our lesson, you'll have real strategies to turn setbacks into superpowers."

II. Body (20-25 minutes)

Part 1: The Captain's Mindset (I Do)

Educator: "Let's start with that key tool: your mindset. There are two basic types." (On the whiteboard, create two columns: "Growth Mindset (Captain)" and "Fixed Mindset (Passenger)").

Educator: "A **Fixed Mindset** is the belief that your skills and intelligence are set in stone—you either have them or you don't. A Passenger often has this mindset. They might say things like, 'I'm just not good at math,' or 'I failed, so I should just give up.' They see a challenge as a threat that might reveal they aren't smart enough."

Educator: "But a Captain has a **Growth Mindset**. This is the belief that you can develop your abilities through dedication and hard work. A Captain sees a challenge not as a threat, but as an opportunity to learn and get stronger. They say things like, 'I don't understand this *yet*,' or 'This attempt didn't work, what can I learn from it?' Your brain is a muscle—the more you use it, the stronger it gets!"

Part 2: Building The Captain's Toolkit (We Do)

Educator: "Now that we have the right mindset, we need some strategies. Let's add three powerful tools to our toolkit for when we get stuck." (*Draw or write these on the whiteboard*).

- Tool #1: The One-Degree Shift. "A ship's captain rarely turns the wheel all the way. They make small, one-degree adjustments. When your plan isn't working, you don't always have to throw it all out. What is one small, tiny thing you could change and try again?"
- Tool #2: The View from the Crow's Nest. "Sometimes you're too close to the problem. This tool is about 'zooming out.' Climb up to the crow's nest (the lookout point) and look at the big picture. Ask yourself: What is my main goal here? Is there a completely different way to get there?"
- **Tool #3: Send a Signal Flare.** "Even the most experienced captains need help. This tool is about knowing when to ask for guidance. Who could you ask? A teacher, a parent, a friend? Or what could you consult? A book, a helpful video? Asking for help is a sign of strength, not weakness."

Let's Practice: "Imagine this scenario: You used your 'Captain's Plan' to practice for your soccer tryouts. Your goal was to make the team. You practiced juggling the ball every day, but at the tryout, the coach mostly had you do running drills, and you ran out of breath. You didn't make the team."

- "What would a **Passenger with a fixed mindset** say?" ("I'm just not a good athlete." "I'm a failure.")
- "Now, what would a Captain with a growth mindset do using our new toolkit?"
 - One-Degree Shift: "My plan was okay, but I'll add running to my practice next time."
 - Crow's Nest View: "My main goal is to be a good soccer player. Maybe I can join a
 different league to get more experience first."
 - Signal Flare: "I'm going to ask the coach what I need to work on for next year's tryouts."

Part 3: The Unpredictable Voyage (You Do)

Educator: "It's time for you to captain your own mission through a storm. Your challenge is this: Using only the spaghetti, tape, and string, build the tallest possible freestanding tower that can support this marshmallow on top. You'll have 15 minutes."

The Captain's Job: "First, use 'The Captain's Log' worksheet to sketch a quick plan. But be prepared...

a storm is coming."

The Twist: Partway through the building time (around 5-7 minutes in), hand each learner a "Sudden Storm" card. They must immediately follow the new rule.

• Sudden Storm Card Examples: "A giant wave just broke your structure! You must deconstruct one-third of your tower." OR "Your dominant hand has been injured! You must build using only your non-dominant hand for the next 3 minutes." OR "High winds! Your tower must now be able to withstand a gentle blow of air without falling."

Educator: "Captain, your initial plan has been challenged! Use your Growth Mindset and your new toolkit to adapt. Document what happened and what you did on your Captain's Log."

III. Conclusion (5 minutes)

Debrief and Recap

Educator: "Captains, time is up! Let's look at these towers. How did it feel when the 'Sudden Storm' hit? Did you feel a 'fixed mindset' reaction at first? What tool from your toolkit did you use to adapt your plan? (*Have learners share their experiences, referencing their Captain's Logs.*)

Final Takeaway

Educator: "Today, we went beyond just making a plan. We learned that being a true Captain isn't about avoiding storms—it's about having the mindset and the tools to navigate them. A fixed mindset tells you to give up when your plan breaks. A growth mindset reminds you that every setback is a chance to learn, adapt, and become an even better Captain. Remember your toolkit—the One-Degree Shift, the Crow's Nest View, and the Signal Flare—the next time you face a real-life challenge."

Assessment & Success Criteria

- **Formative (during lesson):** During the "We Do" scenario, can the learner differentiate between fixed and growth mindset responses? Can they correctly suggest a tool from the toolkit for the problem?
- **Summative (end of lesson):** The completed "Captain's Log" worksheet serves as the assessment. Success is demonstrated when the learner can describe their initial plan, the setback they faced, the specific toolkit strategy they used to adapt, and reflect on the outcome.

Differentiation and Extensions

- For Extra Support: Provide a printed card with the three toolkit strategies on it for easy reference during the challenge. Talk them through the "Sudden Storm" card, asking questions like, "Okay, that's the new rule. What's one small change we could make first?"
- For an Extra Challenge: Ask the learner to reflect on a real-life academic or personal setback they've recently faced. Have them write a short paragraph analyzing it through the lens of Fixed vs. Growth Mindset and identify which toolkit strategy could have helped them navigate it differently.

Worksheet: The Captain's Log
Name:
My Mission: To build the tallest freestanding tower to support a marshmallow.
1. My Initial Course (My Quick Plan/Sketch):
(Space for drawing/writing)
2. Sudden Storm! (What unexpected challenge did you face?):
3. My Fixed-Mindset Reaction (My first thought was):
4. Engaging the Captain's Toolkit (Which tool did you use to adapt? Check one and explain):
[] The One-Degree Shift: I made one small change to my plan, which was
[] The View from the Crow's Nest: I zoomed out and decided to try a different approach, which was
[] Send a Signal Flare: I asked for advice or looked at another person's idea to get unstuck.
Explain your new action:
5. Voyage Outcome (What was the result? What did you learn?):