Pirate Maker Mindset

Using soft materials to explore Maker Culture

CHIEF LEARNING STANDARDS ADDRESSED

• Social Emotional objectives. No Specific Learning Standards

LEARNING TARGETS

- I can write and make a promise to myself and my peers that will help me be successful in school
- When I build physical objects, I embrace the chance to learn something about myself and share that with my community.
- When I observe things built by others, I can infer what it says about who they are and what they value.

OVERVIEW

How does making help you understand in a different way?

- **BEFORE MAKING** Students will engage in a write around, discussion, and collaboratively write a maker pledge as a class.
- **DURING MAKING** Students will create a basic pirate hat as a class, and then redesign/embellish to express their identity through the hat.
- AFTER MAKING Students will reflect on the making process in a class discussion and individually about where the lesson worked and what could be done differently in the future.

EXAMPLES









MAKER PLAN

Grade: 6th

Subject(s): Social Emotional # of students per group: Whole group, individual Time: 2-45 minute periods

MATERIALS

CONSUMABLE

pipe cleaners paper foam popsicle sticks

EQUIPMENT / TOOLS

Scissors hot glue guns

VOCABULARY

culture pledge maker

WHY MAKING?

By building to learn, students will express their identity and increase social emotional relationships with peers.



LEARNING SEQUENCE

BFFORF MAKING

How are students building background knowledge to prepare for making?

MAKER PLEDGE

JOURNALING - Write Around (10 min)

- Write Around Prompts
 - o Ideal Learning Environment
 - Chaotic Learning Environment
 - Building to Learn
- Place papers at each table group. Have students respond to the prompt in the center through writing. (For a more in-depth look at this strategy used to address academic content, see <u>Big Paper</u> by Facing History & Ourselves).
 - Star by ideas you agree with
 - Build on ideas with arrows
 - Ask questions to clarify confusion
 - Disagree using phrases like "For me, ..."
- If students start to lag a bit, call out learning environment examples to trigger memories kindergarten, band, art kitchen, baseball field, dance studio, etc.
- Cut everyone off when time runs out or before there's a lull. Keep the pace always urgent.

WHOLE GROUP DISCUSSION (10 min)

Have groups review their writing and look for the idea they want to share.

- Rapid fire, call on students from different tables. Everyone should be ready to share the idea they think is most
 important. Once shared aloud, ideas should be highlighted on their write-around. That way the same idea isn't shared
 twice by the same group. Repeats from different groups are okay/encouraged because it shows a pattern of thought.
- Notice Patterns.
- Cut everyone off when time runs out or before there's a lull. Keep the pace always urgent.

WHOLE GROUP WRITING (10 min)

Take the most significant noticings and build them into clever sentences with humor about a Maker Pledge.

- Reframe negative ideas into positive ones.
 - ex: Chaotic classrooms don't give us enough time to complete our work ⇒ We will build as quickly as we can
 so when deadlines arrive, we'll be confident we've done all we could; even if it is a hot mess, we'll be proud.
- Leave the ending open ended to include ideas not explicitly stated to honor statements not yet crafted.
 - ex: Being an engineer is slightly more complicated than it looks, so under the surface of this pledge are even more magical ideas and commitments to awesome.
- Focus on handing over agency and responsibility.
 - o ex: This is who we are, even when no one's watching. Being awesome makers comes from within.
- Consider either saying the pledge aloud or having them sign the bottom of the Maker Pledge. Post the pledge visibly in the room similarly to how you would post a list of classroom rules/expectations (Also can be printed as a poster).





l,	_ pledge to be the most amazing maker in all the
land! While making , I will t	use time wisely to avoid being shunned by my group
This also means I will be ar	n active maker and keep busy. When I am not sure
what to do, I will ask my pe	eers for help and not sit like a lump in my chair. Tools
will be respected so I can b	oe safe while making and not lose my fingers or
eyeballs. When I borrow m	naterials or tools, I will put them back where they
belong (since my teacher l	oves to be organized). This also means I will keep my
area clean (so my teacher	won't freak out). I will not be wasteful and take more
materials than necessary, v	which is soooo 1970. Most importantly, I will respect
my group members and lis	sten to their ideas while compromising on solutions it
we can't agree (even thoug	gh I might think I'm right).
Most <u>importantly</u> , I vow to k	eep an open mind, try new things, have FUN, and be an
innovative machine!	
Student Name Printed:	
Student Signature:	Date:



DURING MAKING

How are students recording and processing what they learn?

MAKER CHALLENGE

WHOLE GROUP DISCUSSION

- How to Make a Pirate Hat
 - Have students go through the "making a pirate hat" activity all together.
 - o Don't give students any guidance on building, but that they should be following the basic directions.

DURING WORK SELF REFLECTION

- Discuss the "Power of Personalization" (slide 8) with students and how they felt during that making process.
- Students are then asked to redesign/modify (slide 9) their pirate hat to make it unique and express who they are as a person.
- They can have a couple minutes to prepare and 15 minutes to modify their designs.
- Students will be given 3-4 minutes to clean up before they sit back down in their seats for a whole group discussion.

**Note: You can allow your student more than 15 minutes to modify your designs. However, keeping a time limit is key. Otherwise this can extend on and on. It's okay for students to feel a little frustrated during the process. This will allow them to reflect after making on why time constraints were challenging for them.

AFTER MAKING

How are students synthesizing and analyzing their learning? How are students being assessed on the learning target(s)? How will you and they measure what they know?

WHOLE GROUP / SMALL GROUP DISCUSSION

The teacher will then facilitate a whole group discussion by asking questions using the slides 10/11 from the How to Make a Pirate Hat slide deck. They can turn and talk with their lab partner/table groups, and then share out thoughts/ideas/reflections with the rest of the class. This can also be done digitally through a Google Classroom post or on Padlet.

POSTWORK SELF REFLECTION

• Students fill out a <u>Maker Celebration/Reflection</u> via Google Forms. This is where they can individually celebrate their unique work and reflect on the learning process/challenges they faced throughout making.

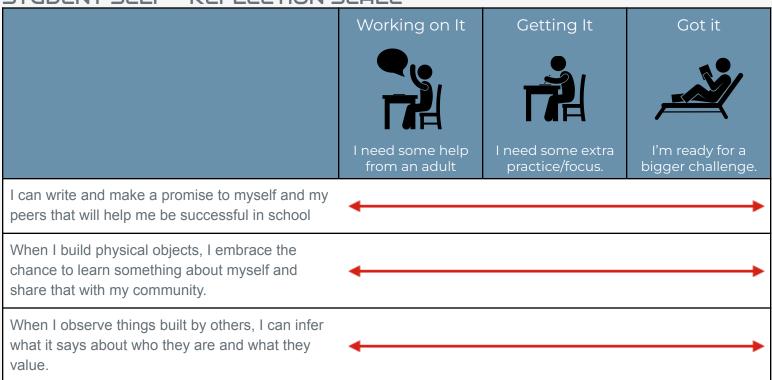
ASSESSMENT

Informally assessed, but not graded.



Maker Culture

STUDENT SELF - REFLECTION SCALE



What other learning do you think is happening while you work? Give some specific moments when you realize you were learning things by building that would be difficult or impossible without building for yourself.



IDEAL

Imagine your ideal learning environment - a school class you've had in the past, a workshop or club you've attended, or a learning space in your dreams.

- What do you see & hear?
- What elements help you learn the very best you possibly might?



CHAOS

Imagine an environment where you aren't able to learn well- a school class you've had in the past, a workshop or club you've attended, or a learning space you fear.

- What do you see & hear?
- What elements get in the way of your learning and being successful?



BUILDING TO LEARN

When you build things with your hands and brain... really build it by yourself-code, towers, simple machines, movies, prototypes, etc.

- what does success look like?
- what do you need?
- what worries you?

