

Innovation Collaborative Out-of-School-Time STEAM Activity/Lesson Template

Activity/Name of Activity/Experience

Age/Grade level

Age/grade range

Duration

• Estimation of activity/lesson duration

Big Idea

- Lead with an Essential Question (overarching or topical question such as "If we can't see force, how do we know it's real?").
- The outcome matches the question.

Objectives/Outcomes

What do you want students to be able to know and do by the end of the activity?

Activity

- Materials
 - o List of materials
- Procedures
 - o Include any necessary modifications for students who participate in the activity
 - o Steps
 - Ahead of time: Prep any materials or information needed.
 - o Demonstrate activity for students, if applicable.
 - Use activity's script, including:
 - What you want the students to get out of the activity
 - The thinking skills* and feedback you want to elicit from the students.
 - *Collaborative Creative/Innovative Thinking Skills used
 - * Arts Habits of Mind addressed
 - o Integrate necessary resources, such as videos, that support the activity.
 - Include activity extensions if time allows.
- Wrap-up
 - Have the students summarize what they learned.
- Assessment (optional)
 - o If your project requires it.

- Standards (optional)
 - If you are working with formal education and need to include the necessary standards:
 - NEXTGEN SCIENCE STANDARDS (NGSS)
 - NATIONAL CORE ARTS STANDARDS (NCAS)
- Background Include what teacher needs to do to assure success
 - Vocabulary
 - Include any disciplinary terms that will be used. Make sure educator/facilitator has a working knowledge of vocabulary in all disciplines used in the activity.
 - Safety information
 - o Information on museum exhibits or other experiences to which the activity relates
 - o Pro tips on differentiation, etc.
 - Disciplinary Practices and Habits of Mind
 - Use these practices and habits of mind to enhance student STEAM higher-level thinking. These thinking skills include <u>Next Generation Science</u>
 <u>Standards (and Practices)</u>, <u>Arts Habits of Mind</u>, and the <u>Innovation</u>
 <u>Collaborative Thinking Skills</u>.
 - Notes for Educator/Facilitator
 - Include notes concerning things to keep in mind during the activity, such as hints to avoid mishaps, materials to have on hand for certain students, or how to adapt for a broader audience.
 - Resources (websites, videos, images, books, research, etc.)

Thanks to Nicole Temple, Vice President of Education, Houston Museum of Natural Science, for helping produce this template.