



Four Characteristics of STEAM: Project Planning Worksheet

Use this worksheet to plan how you'll include four characteristics of STEAM in the project or activity you're planning.

Characteristics (Include all four.)	Students will have opportunities to... (Include at least two for each characteristic.)
Creative Tackles a real-world challenge or creates something that has value or meaning	<ul style="list-style-type: none"> <input type="checkbox"/> Identify a problem no one has thought of before. <input type="checkbox"/> Create a new solution to a known problem. <input type="checkbox"/> Explore multiple solutions. <input type="checkbox"/> Think of new ways to use materials or technologies. <input type="checkbox"/> See themselves as creators, inventors and solution generators. <input type="checkbox"/> Discover or develop knowledge, skills and talents. <input type="checkbox"/> Other: _____ <p>Notes/ideas:</p>
Interdisciplinary Includes content and skills from more than one field of knowledge.	<ul style="list-style-type: none"> <input type="checkbox"/> Explore one or more of the STEAM disciplines in depth. <input type="checkbox"/> Make new connections between STEAM disciplines. <input type="checkbox"/> See how school-day subjects connect to real-world issues. <input type="checkbox"/> Learn about people, past and present, who've used STEAM knowledge and skills to create something meaningful and useful. <input type="checkbox"/> See how people in different careers use knowledge and skills from multiple disciplines. <input type="checkbox"/> Other: _____ <p>Notes/ideas:</p>
Experiential Provides opportunities for active exploration (for example, through a makerspace).	<ul style="list-style-type: none"> <input type="checkbox"/> Make choices and decisions. <input type="checkbox"/> Try new ideas, strategies, materials, roles and processes. <input type="checkbox"/> Contribute to a team effort. <input type="checkbox"/> Develop knowledge and skills through hands-on, minds-on activities. <input type="checkbox"/> Reflect on what they do, think and feel during and after activities. <input type="checkbox"/> Other: _____ <p>Notes/ideas:</p>
Inquiry Based Follows the design thinking process (empathize, define, ideate, prototype, test).	<ul style="list-style-type: none"> <input type="checkbox"/> Ask questions, and learn to ask better questions. <input type="checkbox"/> Explore and try potential solutions. <input type="checkbox"/> Develop a sense of curiosity and wonder. <input type="checkbox"/> Explore how scientists, artists, and inventors from different disciplines build on each other's ideas to make discoveries and create new things. <input type="checkbox"/> Other: _____ <p>Notes/ideas:</p>

