



# Virtual Learning: STEAM Project Planning Worksheet

Use this worksheet to plan virtual project learning activities that are engaging and effective.

## Student Engagement Strategies

- Invite community members to a virtual meeting with students so they can survey them.
- Invite a community expert to join a virtual meeting where students can ask questions.
- Watch videos to get students ready and excited for the activity.
- Provide students with reusable “science bags” with items they can use for a makerspace.
- Host a virtual classroom with specific activities each week.
- Other: \_\_\_\_\_

## Family Engagement Strategies

- Get families informed, excited and on board.
  - Invite families to a virtual orientation session that explains the STEAM approach.
  - Send emails or mail flyers with information about STEAM, including tips on how families can create a makerspace at home with common materials they already have.
- Provide families with an orientation.
  - Explain the STEAM learning approach and how it can benefit students.
  - Preview the activities and materials you plan to use.
  - Explain what a makerspace is and how they can create one at home. Explain what resources you’ll provide and provide a list of household items they can add.
  - Answer their questions.
  - Record the virtual orientation for those who can’t attend the live session.
- Encourage ongoing participation.
  - Offer at-home STEAM activity ideas and resources.
  - Invite families to contribute their knowledge and ideas.
  - Offer training for family members willing to help facilitate virtual STEAM activities.
  - Invite families to virtual events where students showcase their projects and creations.
- Other: \_\_\_\_\_

## Create a Virtual Makerspace

- Explore the use of virtual tools.
  - Consider online software tools designed for making, animation and the arts, like JavaScript, or graphic design software. Many free tools are available online. If you can’t locate a free version of a tool you want for your virtual makerspace, check with the school and local organizations to see if they can help.
  - If you decide to purchase a virtual tool for your makerspace, and it’s within your budget, (1) check to see if there’s a discount for educators, (2) make sure the purchase or license permits multiple users, and (3) make sure it’s compatible with the laptop, tablet or other device where the tool will be downloaded and used. *Before you make a purchase, you might want to check with the school or district technology specialist for guidance on these matters, as well as any security requirements.*
- Other: \_\_\_\_\_