# 21/4" Button Maker



Mid-Valley
STEM-CTE HUB











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## 2 1/4" Button Maker

The 2 1/4" Button Maker kit includes all the supplies needed to design and manufacture custom buttons. Perfect for STEM projects, club activities, art lessons, and student incentives. Easy to use and great for all grade levels, it encourages hands-on learning and developing a maker mindset.



**Grade Level** 

**Group Size** 

**Time Duration** 

**Content of Kits** 

#### **Components**

- Button Press
- Cutter
- Button Face Plates
- Mylar Covers
- Backing Rings
- Pin Inserts
- Paper Circle Templates

6th - 12th grades

up to 4 students at once

1 hour - multiple sessions

### **Consumables**

- Button Face Plates
- Mylar Covers
- Backing Rings
- Pin Inserts
- Paper Circle Templates

\*100 pieces of each included in kit.



## Usage

## **Getting Started**

- 1. Secure the Machine: Place the button maker on a flat, stable surface. Ensure the press is stable. If needed, secure it with clamps.
- 2. Prepare the Circle Cutter: Test with scrap paper to ensure proper sizing and alignment
- 3. Load Button Supplies: Prepare the button components shells (fronts), mylar (clear covers), backing rings, and pin backs.

- 4. Check Alignment: Rotate the dies to ensure they line up correctly under the press.
- 5. Test the Setup: Make one test button to ensure all parts are functioning properly before starting your project.

### **Storage**

When storing, return all components back to Hub-provided storage container. Ensure sharp parts are covered and moving parts secured. Place the kit in a dry area to prevent damage.

## **Troubleshooting**

If the button maker jams or buttons don't form properly, check that:

- 1. All parts are aligned correctly.
- 2. The die base is firmly seated.
- 3. Button components are placed in the correct order.
- 4. Ensure the press handle is fully depressed. Adjust and test again.



## **Activity Guide**

#### **Beginner**

#### Name Badge Buttons

Have students design buttons with their names and simple decorations. Great for introductions, large classes, or tabling events.

#### **Intermediate**

#### **STEM Concept Buttons**

Students create buttons that illustrate key STEM concepts, like the water cycle or basic physics symbols.

#### **Advanced**

#### **Campaign or Cause Buttons**

Students design buttons to promote social causes, events, or campaigns, integrating persuasive messaging, design and manufacturing principles.

#### **Extension Activities:**

Have students create a mini marketing campaign for their buttons. This could include designing promotional materials, creating budgets, setting pricing, write sales pitches, and presenting their products to the class as if launching a small business. Have students present their products and sales pitches. Lead discussion on how creative thinking, prototyping, manufacturing, and communication skills are used in the workforce.

Have students design and create a button or series of buttons. Next have the students practice technical writing skills and communication skills by creating clear step-by-step instructions on how to use the button maker as well as how to recreate the outcome of their button making project. Initiate classroom discussion around the technical instructional writings each group or student created and how this is a communication critical skill in the workforce.



## **Learning Extensions**

### STEAM Connections: Manufacturing - Design - Art

#### **Learning Objectives:**

- Develop design, problem-solving, and creativity skills through hands-on button-making.
- Learn about production processes, quality control, and manufacturing techniques.
- Understand the practical applications of graphic design in product development.
- Enhance time management, organization, and initiative through project-based learning.
- Foster teamwork and communication by collaborating on creative and technical tasks.

#### **Career Connections:**

- Button-making introduces design, marketing, commerce, and production skills.
- Develop graphic design expertise by creating engaging and visually appealing buttons.
- Explore manufacturing and production techniques, including quality control and assembly.
- Gain an understanding of entrepreneurship and product development through custom merchandise creation.
- Learn promotional product development, connecting to careers in branding, advertising, and merchandising.

### **Essential Employability Skills:**

- Communication
- Adaptability
- Time Management
- Initiative
- Planning
- Organization
- Teamwork
- Problem Solving





## **Resources and Accessibility**

## **Safety Guidelines**

- Adult Supervision: Ensure an adult is present to oversee button-making activities, especially when students are using the press and cutter.
- Proper Handling:
  - Use the button press and circle cutter only as intended.
  - Keep hands and fingers away from moving parts when pressing or cutting.
- **Sharp Edges:** Be cautious when handling the circle cutter and metal button parts, as they may have sharp edges.
- **Stable Workspace:** Set up the equipment on a flat, stable surface to prevent slips or accidents.

## **Accessibility**

- **Physical Support:** The equipment requires hand dexterity; students
- with mobility challenges may need assistance.
- Workspace Adjustments: Use a stable, adjustable-height table ample space for accessibility.
- **Sensory Needs:** Provide high-contrast visuals, step-by-step instructions.
- Alternative Roles: Offer design, assembly, or supply management tasks for students unable to operate the equipment.

## **Library Catalog**



## **Library Resources**



### **Feedback**

QR to feedback survey

