

In the final module of the program, students will design and create a reflection poster that represents all the learning they have gained. This poster should reflect how their thinking and understanding have grown. On the last day of ST Math Summer Immersion, students will display their reflection poster as part of a gallery walk at the Learning Showcase and Celebration to their classmates, parents, administrators, and the community.

The **Reflection Poster** summarizes all of the completed student work in the Problem Solving Journal. On a poster, students will pull all of this together for display. In younger grades, consider giving students sentence starters like, "What I learned this summer was..." or "I am proud of..." to help them reflect on their learning. They can be creative with their posters by drawing pictures or using cutouts from magazines. The idea is to showcase what they learned this summer.

It is recommended that students work in small groups to complete this project because that allows students to engage in higher-order thinking skills (e.g., evaluating their learning and the ideas of others, synthesizing their thoughts and the thoughts of others, reaching consensus, and working together). It can however be done as an individual project. Have students begin by using the Design Process as described below.

# THE DESIGN PROCESS: Designing a Reflection Poster

#### STEP 1 - ASK THINKING ABOUT YOUR LEARNING



One of our jobs as mathematicians is to tell stories about math. Questions to consider: What have I learned? How did I learn it? What was hard but is easier now? What vocabulary did I learn? How did playing the games help me? How could I show others what I have learned? Did I reach my learning goals?

#### **STEP 2 - INVESTIGATE**

## **EXPLORING WHAT YOU KNOW**

Think about the different skills you have learned this summer. Make a list of all the things you have learned. What do you remember about the problems you have solved? Which ones were tricky? Do you solve problems differently now that you have learned more strategies?

TIP: Use your My Thinking Path and Exit Tickets to help you synthesize your learning. What are some ways can you display your learning?

## STEP 3 - IMAGINE BRAINSTORMING IDEAS

As a team, work together to brainstorm ideas and develop the poster design. Every team member should have an opportunity to share ideas and build off of each other. Remain focused on the task. A good design is about working together. Think about the areas in math that you or others really did well. What are some of the strategies you use when you come across a difficult problem? How could you organize these ideas on your poster?



#### **STEP 4 - PLAN**

### **DISCUSSING WHAT YOU WANT TO DESIGN**

Once everyone has shared, take all your ideas and combine it to make one big idea. How can you make your poster colorful, interesting, and informative?

### **STEP 5 - CREATE**

### CONSTRUCTING WHAT YOU WANT TO SEE

Using your ideas, sketch a draft of your Reflection Poster in your Problem Solving Journal. This is the time to be creative, use your imagination, and construct a visually appealing poster.

#### **STEP 6 - TEST**

#### **GETTING FEEDBACK**

Once you have designed your rough draft, you need to show others to gather feedback. Ask your classmates to look at your design. Ask them if it makes sense and how it could be better. Use the information you have learned from your classmates to decide what works and what needs to be changed.

## STEP 7 - IMPROVE REVIEWING THE FEEDBACK

Discuss how you could improve your design. Make the changes needed. Repeat steps 6 & 7 until you are happy with your design. Then, create your final copy of your Reflection Poster for display.

# **REFLECTION POSTER:** Student Display

On the last day, students will display their Reflection Posters. They should prepare their presentation of their reflection posters and math games (if applicable) for the Learning Showcase and Celebration. Students will be asked to answer questions from the audience. It may be helpful to have students review the questions on the Immersion Debriefing Bookmark. They can think about how they want to share what they have learned this summer and how it helped them grow as a mathematician.