



## Geometric Design Problem Solving

### Today's Standard

HSG.MG.A3 - Apply geometric methods to solve design problems (e.g., designing an object or structure to satisfy physical constraints or minimize cost; working with typographic grid systems based on ratios).\*

### Real-World Applications for this Standard

Designing a bridge to meet safety standards; Creating cost-effective packaging; Planning urban layouts; Developing ergonomic furniture; Designing efficient irrigation systems

### Today I Learned

Today we learned how to use geometry to solve real-world design problems, like building things that are safe and cost-effective.

### Common Stumbling Blocks

Some kids think there's only one right answer to design problems, but there can be many good answers. Others think geometry is just for school, but it's used in many jobs like building and planning cities.

### Quiz Me

- What shapes do you know?
- How can you use a triangle in building something?
- Why might you need to measure angles?
- Can you think of something in your house that was designed using geometry?
- What do you think is more important, the shape or the size of an object?

### Help Me

Geometry helps us solve real-world problems, like designing safe buildings and making things cheaper to produce. It's not just about math; it's about finding the best way to do things in everyday life.