



## Rigid Motions and Congruence

### Today's Standard

HSG.CO.B6 - Use geometric descriptions of rigid motions to transform figures and to predict the effect of a given rigid motion on a given figure; given two figures, use the definition of congruence in terms of rigid motions to decide if they are congruent.

### Real-World Applications for this Standard

Designing symmetrical patterns in art and architecture; Engineering mechanical parts that must fit together precisely; Computer graphics and animation transformations; Robotics movement and positioning; Navigation and mapping using coordinate systems

### Today I Learned

Today, we learned about how shapes can be moved around without changing their size or shape. This helps us see if two shapes are exactly the same.

### Common Stumbling Blocks

Sometimes kids think shapes have to look the same way to be the same, but they can be turned or flipped. Also, some kids mix up shapes that are the same size and shape with those that just look alike.

### Quiz Me

- Can you name a way to move a shape without changing it?
- What happens when you flip a shape over a line?
- How do you know if two shapes are the same?
- Can two shapes be the same if one is turned around?
- What is it called when two shapes are the same size and shape?

### Help Me

Shapes can be moved by sliding, turning, or flipping them. This is important in real life, like when designing buildings or making sure parts fit together perfectly.