

Objective

Students will:

- Create, compare and describe different two-dimensional nets that can be folded into a three-dimensional cube
- Examine the properties of the nets and resulting cubes, including surface area
- Use rotations and flips to compare various nets

“I Can” Statement

I can create and describe different geometrical nets.

Common Core Standards

[CCSS.MATH.CONTENT.6.G.A.4](#)

Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real-world and mathematical problems.

[CCSS.MATH.CONTENT.HSG.GMD.B.4](#)

Identify the shapes of two-dimensional cross-sections of three-dimensional objects, and identify three-dimensional objects generated by rotations of two-dimensional objects.

Bell Work

Have a box on every desk and a pair of scissors. Tell the students to cut the box so that the outside faces of the box lay flat on their desk.

****IMPORTANT**** The box has to remain one in one single piece of card board. No Pieces! How many different nets were created?

Procedures

1. Start and lead student discussion related to the bell work.
2. Distribute the Guided Notes
3. Present lesson or play a video lesson.
4. Distribute Lesson Assignment.

5. Have students check each other's work.

Assessment

Assignment 1-1

What properties are common to all nets that will form a cube?

Without folding, is there a quick way to determine whether or not a net will fold into a cube?

Additional Resources

Khan Academy Quiz