Math 4 - Act. 15: Making Nets for Solids

Summary

This activity helps students relate cubes, cylinders, cones, and rectangular prisms to the twodimensional shapes (nets) from which they were created.

Materials

A variety of commercial containers in the shape of cones, cubes, rectangular prisms, cylinders Geo-solids (e.g., cubes, cones, rectangular prisms, cylinders) Additional Resources *Geo-blocks Job Cards* (Creative Publication) *Jacket constructions grades 4-8* (Creative Publications)

Background for Teachers

Nets are the two-dimensional shape that, when folded, would cover a three-dimensional solid.

Intended Learning Outcomes

- 2. Become mathematical problem solvers.
- 3. Reason mathematically.

Instructional Procedures

Invitation to Learn

If we cut these containers at the seams what will they look like?

Instructional Procedures

For each cube, cone, rectangular prism, and cylinder, do the following:

Take apart each box or container at the seams.

Examine the two dimensional shape from which it came.

- Discuss how the net was made and the two-dimensional shapes that made it.
- Make a net that will fit the solid.

Allow students to work with geo-solids (blocks) and make the net that would fit it.

Extensions

Possible Extensions/Adaptations/Integration:

Find solids in the world. Take a geometry hike and discover where and how solids are used in the building world.

Homework & Family Connections

Have students show parents how to make nets listed in the objective.

Assessment Plan

Given any solid listed in the core, students should be able to make a net to fit. After the net is drawn, have students cut out, fold, and check it for fit.

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