

Date: 4/22

Standards:

5.MD.5 *Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume.*

- a. *Recognize volume as additive. Find volumes of solid figures composed of two non-overlapping right rectangular prisms by adding the volumes of the non-overlapping parts, applying this technique to solve real world problems.*

Standard for Mathematical Practice:

SMP 3: Construct viable arguments and critique the reasoning of others

SMP4: Model with mathematics

SMP7: Look for and make use of structure (adding volumes).

K: Compound volume; how to add volumes together

U Students will understand that often irregular shapes or solids can be separated into familiar shapes or solids. Then composite areas or volumes can be found.

D: The students will be able to explain the role of units in geometric measurement.

The students will be able to correctly calculate volumes of right rectangular prisms and composite shapes made of right rectangular prisms.

Whole Class:

1. Have each student to build a right rectangular prism with 24 cubes or less. Find the volume of their shape and write it very small in the corner of their whiteboard to keep it secret.
2. Students find a partner and put their two prisms next to each other to form a compound shape.
3. Students find the volume of their compound shape and compare it to their individual volumes.
4. Discuss compound volumes and compare to compound area.

Partner Activity:

Building Compound Volumes

Practice Sheets

Meet with Teacher: Readiness differentiation

Closure: Inside/Outside Circles with compound volume cards

Formative Assessment/ Check for Understanding: Exit card. Given a drawing of a compound shape (2 or more prisms), explain step-by-step how to find the total volume.