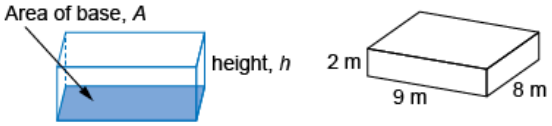
Measurement

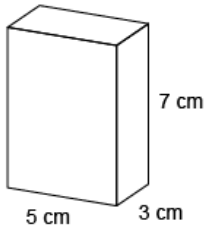
Activity 4 Assessment

Determining the Volume of Right Rectangular Prisms

Determining the Volume of Right Rectangular Prisms		
Understands that volume is a measure of how much space an object fills.  "The rectangular prism has a base that is a rectangle. It is made of 24 cubes, so its volume is 24 cubic units.	Uses benchmarks to estimate volume using metric units.  "I would use a large dog crate as a benchmark for 1 m^2 to measure the volume of storage room."	Use a formula to calculate the volume of a rectangular prism.  "I determined the area of the base: 9 m × 8 m = 72 m^2. Then I multiplied the area of the base by the height: 72 m^2 × 2 m = 144 m^3. The volume of the box is 144 m^3."
Observations/Documentation		

Activity 4 Assessment

Determining the Volume of Right Rectangular Prisms

Determining the Volume of Right Rectangular Prisms (cont'd)		
Constructs different rectangular prisms for a given volume. Make as many different rectangular prisms as you can with a volume of 30 cm^3. "I made 5 different prisms. The dimensions are: 1 cm by 1 cm by 30 cm; 1 cm by 2 cm by 15 cm; 1 cm by 3 cm by 10 cm; 1 cm by 5 cm by 6 cm; 2 cm by 3 cm by 5 cm."	Sketches rectangular prisms and calculates volume using formula V = base area × height.  "The base area is: 3 cm × 5 cm = 15 cm^2. The height is 7 cm. Volume = 15 cm^2 × 7 cm = 105 cm^3."	Flexibly solves problems in various contexts that involve the volume of rectangular prisms. A box has volume 4500 cm^3. The box has length 30 cm and width 15 cm. What is the height of the box? "The area of the base of the box is 30 cm × 15 cm = 450 cm^2. V = base area × h 4500 cm^3 = 450 cm^2 × h h = 10 cm The box has height 10 cm."
Observations/Documentation		