

Name _____

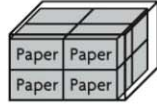
Estimate Volume

COMMON CORE STANDARD CC.5.MD.4

Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.

Estimate the volume.

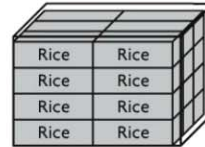
1. Volume of package of paper: 200 cu in.



Think: Each package of paper has a volume of 200 cu in. There are 8 packages of paper in the larger box. So, the volume of the large box is about 8×200 , or 1,600 cubic inches.

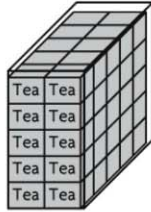
Volume of large box: 1,600 cu in.

2. Volume of rice box: 500 cu cm



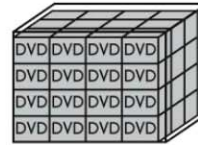
Volume of large box: _____

3. Volume of tea box: 40 cu in.



Volume of large box: _____

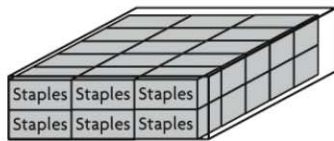
4. Volume of DVD case: 20 cu in.



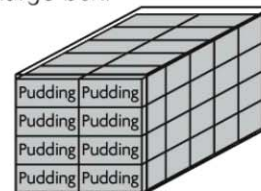
Volume of large box: _____

Problem Solving **REAL WORLD**

5. Theo fills a large box with boxes of staples. The volume of each box of staples is 120 cu cm. Estimate the volume of the large box.

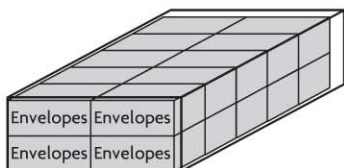


6. Lisa uses pudding boxes to estimate the volume of the box below. The volume of each pudding box is 150 cu in. Estimate the volume of the large box.



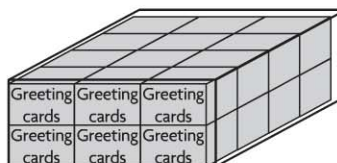
Lesson Check (CC.5.MD.4)

1. Melanie packs boxes of envelopes into a larger box. The volume of each box of envelopes is 1,200 cubic centimeters. Which is the best estimate for the volume of the large box?



- (A) 2,400 cu cm
- (B) 12,000 cu cm
- (C) 20,000 cu cm
- (D) 24,000 cu cm

2. Calvin packs boxes of greeting cards into a larger box. The volume of each box of greeting cards is 90 cubic inches. Which is the best estimate for the volume of the large box?



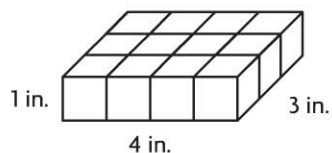
- (A) 216 cu in.
- (B) 240 cu in.
- (C) 2,160 cu in.
- (D) 2,400 cu in.

Spiral Review (CC.5.MD.1, CC.5.MD.3a, CC.5.MD.3b, CC.5.MD.4)

3. Rosa has 16 unit cubes. How many different rectangular prisms can she build with the cubes? (Lesson 11.6)

- (A) 2
- (B) 3
- (C) 4
- (D) 8

4. Each cube represents 1 cubic inch. What is the volume of the prism? (Lesson 11.7)



- (A) 1 cu in.
- (B) 4 cu in.
- (C) 8 cu in.
- (D) 12 cu in.

5. A certain aquarium holds 20 gallons of water. How many quarts of water does the aquarium hold? (Lesson 10.2)

- (A) 160 quarts
- (B) 80 quarts
- (C) 10 quarts
- (D) 5 quarts

6. Monique ran in a 5-kilometer race. How many meters did Monique run? (Lesson 10.5)

- (A) 50 meters
- (B) 500 meters
- (C) 5,000 meters
- (D) 50,000 meters