Name _____ Date _____

Volume: Skill 5 - 23C

Volume of Rectangular Prisms

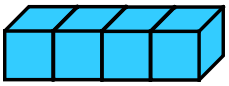
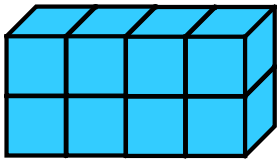
Volume is the amount of space a 3-dimensional figure occupies.

Volume is measured in cubic units.

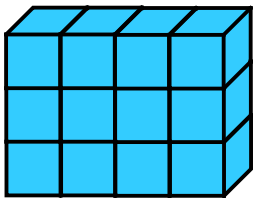
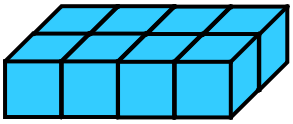
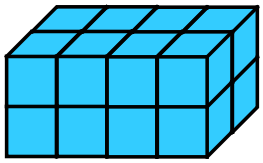
Some examples of cubic units are cubic inches (in.^{3}) and cubic meters (m^3).

Method Number One: Count the cubic units.

If you have centimeter cubes, you can make the models below.

 1 cubic unit	 The volume is 4 cubic units.	 The volume is 8 cubic units.

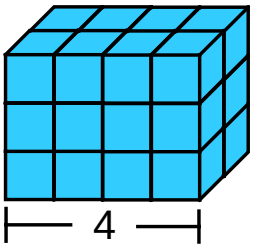
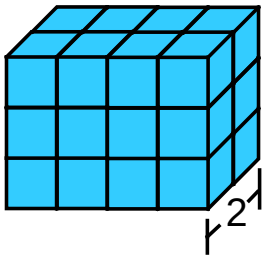
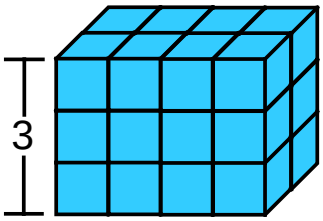
Directions: Find the volume. Fill in the blank line for each.

1.  the volume is _____ cubic units	**2.**  the volume is _____ cubic units	**3.**  the volume is _____ cubic units

Method Number Two: Use a Formula

Volume = length x width x height

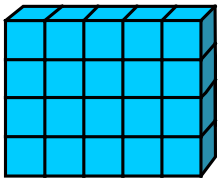
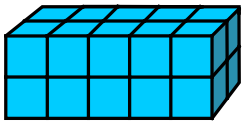
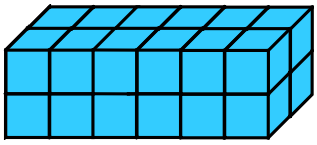
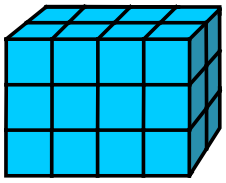
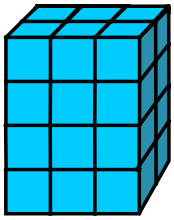
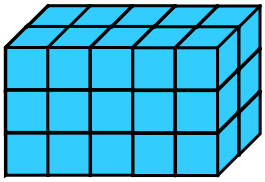
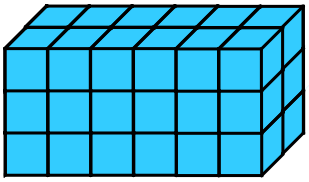
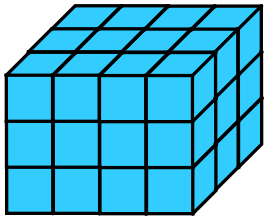
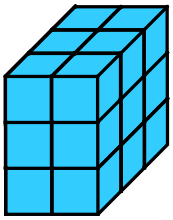
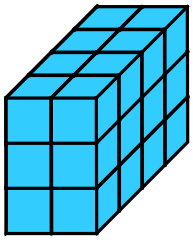
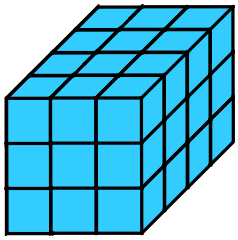
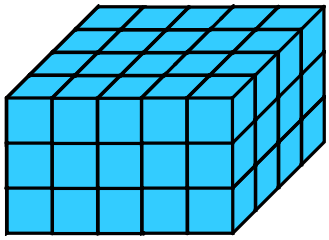
or $V = l \times w \times h$, *where* l = length, w = width and h = height.

 The length is 4 cubes.	 The width is 2 cubes.	 The height is 3 cubes.	Multiply length times width times height. 4 x 2 x 3 = 24 The volume is 24 cubic units.

Volume: Skill 5 - 23C

Volume

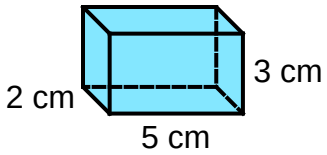
Directions: Find the volume. Count or multiply.

1.  *V* =_____ cubic units	**2.**  *V* =_____ cubic units	**3.**  *V* =_____ cubic units	**4.**  *V* =_____ cubic units
5.  *V* =_____ cubic units	**6.**  *V* =_____ cubic units	**7.**  *V* =_____ cubic units	**8.**  *V* =_____ cubic units
9.  *V* =_____ cubic units	**10.**  *V* =_____ cubic units	**11.**  *V* =_____ cubic units	**12.**  *V* =_____ cubic units

Volume: Skill 5 - 23C

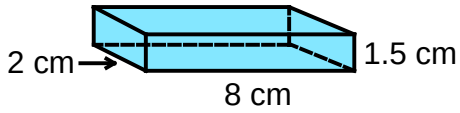
Directions: Find the volume.

13.



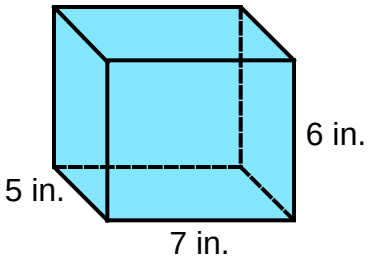
Volume = _____ cubic centimeters or _____ cm^3

14.



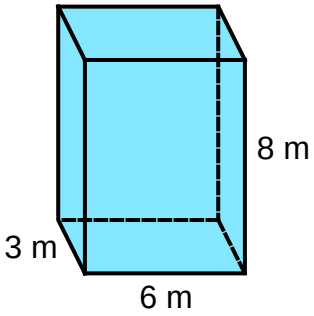
Volume = _____ cm^3

15.



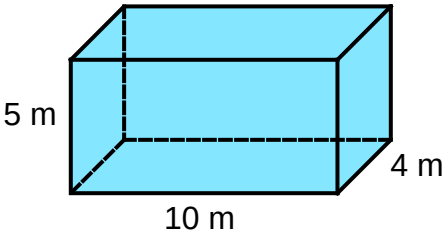
Volume = _____ $in.^3$

16.



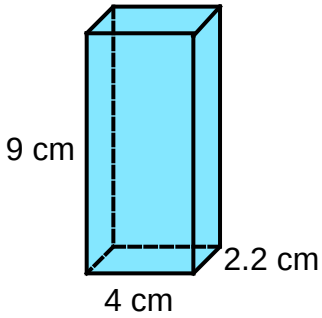
Volume = _____ m^3

17.



Volume = _____ m^3

18.

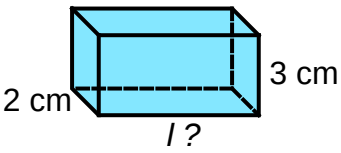


Volume = _____ cm^3

Directions: Find the unknown measure.

19.

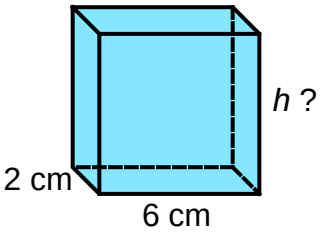
$V = 36\ cm^3$



Find the missing length.
Note: *l* means length

20.

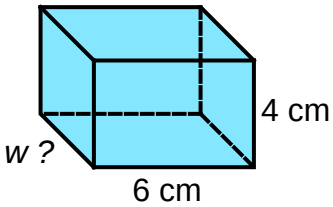
$V = 72\ cm^3$



Find the missing height.

21.

$V = 96\ cm^3$



Find the missing width.

Answer Key Skill 23C Grade 5

Examples pg 1

1. 12 cubic units
2. 8 cubic units
3. 16 cubic units

Questions pg 2 and 3

1.	20 cubic units	2.	20 cubic units	3.	24 cubic units	4.	24 cubic units
5.	24 cubic units	6.	30 cubic units	7.	36 cubic units	8.	36 cubic units
9.	18 cubic units	10.	24 cubic units	11.	36 cubic units	12.	60 cubic units
13.	30 cm^3	14.	24 cm^3	15.	210 in^3	16.	144 m^3
17.	200 m^3	18.	79.2 cm^3	19.	l = 6 cm	20.	h = 6 cm
21.	w = 4 cm						