1. The metric units of length, volume and mass are all derived from
a. the weight of water.
b. the meter.
c. the distance to the king's nose.
d. They are not related.
2. The purpose of using a standard system of units like the metric system is
a. to be able to reproduce results.
b. make things sound "scientific".
c. that it makes the math easier.
d. that the metric system came from France!
3. 100 mL are equal to
a. 1 cm 3
b. 10 cm 3
c. 100 cm 3
d. 1000 cm 3
4. $10.0 \mathrm{~m}=$
a. $10,000 \mathrm{~mm}, 1000 \mathrm{~cm}, 0.01 \mathrm{Km}$
b. $100,000 \mathrm{~mm}, 1000 \mathrm{~cm}, 1 \mathrm{Km}$
c. $100,000 \mathrm{~mm}, 1000 \mathrm{~cm}, 0.1 \mathrm{Km}$
d. $10,000 \mathrm{~mm}, 10,000 \mathrm{~cm}, 0.1 \mathrm{Km}$
5. $50 \mathrm{Kg}=$
a. $50,000,000 \mathrm{mg}$
b. $5,000,000 \mathrm{cg}$
c. $50,000 \mathrm{~g}$
d. all of the above
6. $65 \mathrm{~mL}=$
a. $6.5 \mathrm{CL}, 0.65 \mathrm{~L}, 0.000065 \mathrm{KL}$
b. $650 \mathrm{cL}, 65,000 \mathrm{~L}, 65,000,000 \mathrm{KL}$
c. $6.5 \mathrm{cL}, 0.065 \mathrm{~L}, 0.000065 \mathrm{KL}$
d. $6.5 \mathrm{cL}, 0.065 \mathrm{~L}, 0.00065 \mathrm{KL}$
7. What is the volume of a box $300 . \mathrm{cm} \times 2.50 \mathrm{~m} \times 6.00 \mathrm{~m}$.
a. $45.0 \mathrm{~m}^{3}$
b. $4.50 \times 10^{7} \mathrm{~cm}^{3}$
c. both $a$ and $b$
d. neither a nor b
8. Two people measure the mass of a rock. One person gets a mass of 27.4 g . The other person, using the same exact balance, gets a mass of 27.3 g . Which measurement is right?
a. They're both right because the balance is not accurate.
b. They're both right because the last digit in any measure is an estimate.
c. They are both right because 0.1 grams is really small.
d. They need to remeasure the rock until they get the same answer.
9. Would you rather have a centidollar or a kilodollar?
a. The $\mathrm{c} \$$, it is worth $\$ 100$ while the $\mathrm{K} \$$ is worth $\$ 0.001$.
b. The $\mathrm{K} \$$, it is worth $\$ 100$ while the $\mathrm{c} \$$ is worth $\$ 0.001$.
c. The $\mathrm{c} \$$, it is worth $\$ 0.01$ while the $\mathrm{K} \$$ is worth $\$ 0.001$.
d. The $\mathrm{K} \$$, it is worth $\$ 1000$ while the $\mathrm{c} \$$ is worth $\$ 0.01$.
10. How many Kg is a 130 lb person ( $1 \mathrm{~kg}=2.2 \mathrm{lbs}$ ) ?
a. 286 Kg
b. 59.1 Kg
c. 130 Kg
d. 579 Kg
11. 12.00 seconds is how many years?
a. $378,432,000$
b. $31,536,000$
c. 0.000000381
d. 0.00000457
12. How many centimeters is 3.5 miles ( 1 mile $=1.6 \mathrm{~km}$ ) ?
a. 5.6
b. 5600
c. 560,000
d. $5,600,000$
13. If a car is traveling 60 miles per hour, it is also going how many meters per second?
a. 27
b. 1600
c. 96
d. 1.6

Use the following for questions \#14-17.
1 rock $=4$ stones $\quad 1$ stone $=7$ pebbles $\quad 1$ pebble $=8$ grains
14. 120 rocks is
a. 3360 pebbles.
b. 4.29 pebbles.
c. 28 pebbles.
d. 0.0357 pebbles.
15. One stone is
a. 0.0179 grains.
b. 56.0 grains.
c. 224 grains.
d. 8.00 grains.
16. 10,000 grains are
a. 0.287 rocks.
b. 44.6 rocks.
c. $2,224,000$ rocks.
d. 224 rocks.
17. $1 / 2$ a rock is
a. 0.00223 grains.
b. 0.00446 grains.
c. 224 grains.
d. 112 grains.
18. What is the length of the object below?

a. 4.5 m
b. 4.6 m
c. 3.7 m
d. 3.75 m
e. 3.70 m

