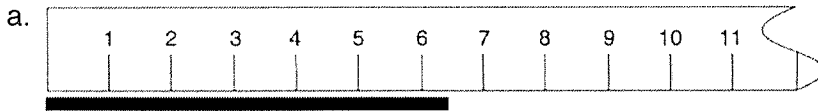


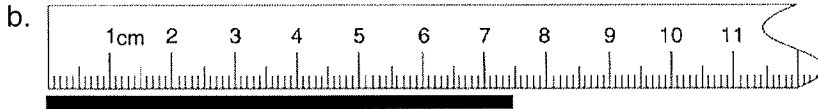
Name: KEY

## Math Essentials

1. To the correct number of significant figures, record the measurement of the black line:



6.4 cm last digit  
is estimated!



7.42 cm

2. Give the number of significant figures in each of the following measurements:

c. 30,406 cm 5

j.  $2.00 \times 10^{-3}$  mL 3

d. 0.003040 g 4

k. 30 m 1

e. 3,005 kg 4

l.  $4.12 \times 10^5$  cm<sup>3</sup> 3

f. 270 pairs ∞

m. 0.00078 mg 2

g. 0.20 mm 2

n. 22.70 cm 4

h. 105,000 s 3

o. 0.176 m/s 3

i. 13,030 L 4

p. 52 pencils ∞

3. Express the following numbers in scientific notation with the correct number of significant figures and units:

a. 9,457 km  $9.457 \times 10^3$  km

f. 0.000670 g  $6.70 \times 10^{-4}$  g

b. 0.00007 cm  $7 \times 10^{-5}$  cm

g. 332,080,000 L  $3.3208 \times 10^8$  L

c. 21,000 s  $2.1 \times 10^4$  s

h. 0.0002383 cg  $2.383 \times 10^{-4}$  cg

d. 0.01234 mg  $1.234 \times 10^{-2}$  mg

i. 0.3048 ms  $3.048 \times 10^{-1}$  ms

e. 652.38 mL  $6.5238 \times 10^2$  mL

j. 300 m  $3 \times 10^2$  m