| Name | $:$ |
| :--- | :--- |
| Date | $: 11$ Nov 2008 |
| Class | $:$ VII A |
| Student Worksheet | $: 1.2$ |
| Unit | $:$ Length |

## Study Guide

1. ___ shows the distance between two points.
2. The SI unit for length is
3. Look at the figure below!


Write the length pointed by the arrows in the figure!
a. $\qquad$ $\mathrm{mm}=$ $\qquad$ cm
b. $\qquad$ $\mathrm{mm}=$ $\qquad$ cm
C. $\qquad$ $\mathrm{mm}=$ $\qquad$ cm
d. $\qquad$ $\mathrm{mm}=$ $\qquad$ cm
e. $\qquad$ $\mathrm{mm}=$ $\qquad$ cm
f. $\qquad$ $\mathrm{mm}=$ $\qquad$ cm
g. $\qquad$ $\mathrm{mm}=$ $\qquad$ cm
h $\qquad$ $\mathrm{mm}=$ $\qquad$ cm
i. $\qquad$ $\mathrm{mm}=$ $\qquad$ cm
j. $\qquad$ $\mathrm{mm}=$ $\qquad$ cm
4. Put the following units in sequence ascending, from the smallest to the largest! milimeter, meter, decameter, micrometer, kilometer, decimeter, hectometer, centimeter, nanometer
$\qquad$
5. Complete the following conversions!
a. $25 \mathrm{~m}=$ $\qquad$ cm b. $2 \mathrm{~km}=$ $\qquad$ m
c. $120 \mathrm{~mm}=$ $\qquad$ cm d. $240 \mathrm{~cm}=$ $\qquad$ dm
d. $150 \mathrm{~mm}=$ $\qquad$ dm e. $200 \mathrm{dm}=$ $\qquad$ m

| Name | $:$ |
| :--- | :--- |
| Date | $: 11$ Nov 2008 |
| Class | :VII A |
| Student Worksheet | $: 1.3$ |
| Unit | $:$ Mass and time |

## Study Guide

## I. Mass

A. After reading the discussion about mass in student book, answer the following questions by filling the blanks with the words in the box. You can use them more than once.

## mass weight kilogram balance

1. The quantity of materials in an object is called $\qquad$ .
2. $\qquad$ is a tool to mesure mass.
3. The SI unit for $\qquad$ is $\qquad$ .
4. If you go to the moon, your $\qquad$ remains constant, but your $\qquad$ will change.
B. Look at the scales of the balance below!


The scale shows the mass is $\qquad$ gram(s).
C. Fill in the blanks using the prefixes of the SI unit in sequence descending! kilogram, $\qquad$ $\rightarrow$, $\qquad$ , decigram, $\qquad$ miligram.
D. Complete the following conversion!
a. $1 \mathrm{~kg}=$ $\qquad$ gram
b. 250 gram = $\qquad$ kg
c. 15 gram = $\qquad$ mg
d. 1 ton = $\qquad$ kg

## II. Time

1. $\qquad$ shows the interval between two events.
2. The SI unit for time is $\qquad$
3. Convert the following units!
a. 2 minutes $=$ $\qquad$ seconds b. 1.5 hours $=$ $\qquad$ minutes
c. 300 minutes $=$ $\qquad$ hours d. 1 hour = $\qquad$ seconds

| Name | $:$ |
| :--- | :--- |
| Date | $: 18$ Nov 2008 |
| Class | $:$ VII A |
| Student Worksheet | $: 1.5$ |
| Unit | $:$ Volume |

## Study Guide

A. After discussing volume in student book, fill in the following sentences with appropriate words!

1. $\qquad$ states the space occupied by materials.
2. Volume consists of fundamental quantities $\qquad$ .
3. The SI unit for volume is $\qquad$ .
B. Look at the figure below!

The bold line shows the level of liquid surface. Write the scale showed by

## Figure a



Figure $\mathbf{a}$.


Figure b
shows $\qquad$ ml The volume of rectangular block is = $\qquad$ $\mathrm{cm}^{3}$
C. To measure the volume of an irregular rock, Andi uses a measuring cylinder. First, the measuring cylinder is filled with water as in Figure 1, then the rock is put into the cylinder and the level of the water is raised as shown in Figure 2.


Figure 1
The volume of the rock is =
D. Complete the following conversion!


| Name | $:$ |
| :--- | :--- |
| Date | $: 18$ Nov 2008 |
| Class | $:$ VII A |
| Student Worksheet | $: 1.6$ |
| Unit | $:$ Quantity and Unit |

## Remedial

A. One of the advantages of using the SI unit is that expansion and conversion are made easy by adding the prefixes: kilo, deci, mili etc. They are developed using the base number 10 as in the concept map below. To show your map, fill in the empty boxes.

B. Put the following units in sequence, from the smallest to the largest! dam, km, $\mathbf{m}$, $\mathbf{~ m m}$, hm, cm, dm, nm, mm
C. Underline the larger units in the following pairs of unit!

1. milimeter, micrometer
2. centimeter, milimeter
3. decimeter, decameter
4. hectometer, kilometer
D. Circle the letter of unit groups below that are written descending, from the largest to the smallest!
a. hectogram, kilogram, decigram, gram
b. decameter, meter, micrometer, nanometer
c. second, minute, hour, day, month
d. cubic meter, liter, cubic centimeter
E. Below are fundamental quantity and basic units. Underline the wrong units for the mentioned fundamental quantity.
5. Volume : liter, gallon, cubic meter
6. Mass : centigram, mL, centum
7. Length : kilometer, light year, second
8. Time : second, century, light year, minutes
F. $100 \mathrm{~m}=\mathrm{dm}$
$=\quad \mathrm{hm}$
$=\quad \mathrm{km}$
$=\quad \mathrm{cm}$
$\begin{array}{ll}= & \mathrm{mm} \\ = & \mathrm{nm}\end{array}$
G. Look at the unit conversion, please circle the correct conversion!
a. $1 \mathrm{~kg}=100 \mathrm{gram} \quad$ e. $1000 \mathrm{~g}=1 \mathrm{~kg}$
b. $1 \mathrm{dm}=10 \mathrm{~m}$
f. $1 \mathrm{dm}=0,10 \mathrm{~m}$
c. $1 \mathrm{ml}=1 \mathrm{~cm} 3$
g. $1 \mathrm{~cm} 3=1$ liter
d. 1 liter $=1 \mathrm{dm} 3$
h. 1 liter $=1 \mathrm{~cm} 3$
H. Complete the following conversion.
a. $25 \circ \mathrm{C}=\mathrm{OF}=\mathrm{K}$
b. $50 \circ \mathrm{~F}=\quad \mathrm{OC}=\mathrm{K}$
c. $20 \circ \mathrm{C}=\mathrm{oF}=\mathrm{K}$
