

Name: _____

ACTIVITY # 1.1 Physical Quantities

Date due: _____

1. Name the Seven (7) Fundamental Quantities

- a. _____
- b. _____
- c. _____
- d. _____
- e. _____
- f. _____
- g. _____

2. Classify the following quantities into Fundamental or Derived quantities.

a	Mass	
b	Speed	
c	Momentum	
d	Distance	
e	Time	

3. Complete the table below with correct information.

Physical Quantity		SI Unit	Symbol of Unit
a	mass		
b	force		
c	weight		
d	speed		
e	distance		
f	acceleration		
g	density		

4. Change the following non-SI units into its standard SI units.

	Non-SI unit	Standard SI Unit
a	gram	
b	centimeter	
c	hour	
d	inches	
e	Centimeter per seconds	
f	milligram	
g	Newton per centimeter	
h	Gram per cubic centimeter	
i	Kilometer per hour squared	
j	Joules per minutes	

5. Name the quantities that have the same units.

- a. _____ and _____
- b. _____ and _____
- c. _____ and _____
- d. _____ and _____

6. Write the alternative name for the following units.

- a. Newton per kilogram - _____
- b. Newton meter - _____
- c. Joules per second - _____
- d. Newton per meter squared - _____
- e. Kilogram-meter per second squared - _____

7. Classify the following quantities into scalar or vector quantities.

a	acceleration		f	momentum	
b	force		g	displacement	
c	mass		h	velocity	
d	time		i	speed	
e	density		j	weight	

Question 8

Match the units listed in **column P** with the correct variable listed in **column Q**, by writing the letter corresponding to the correct answer from **column P** in the space provided in **column Q**.

Column P	Column Q
A joule	(i) Rate of energy production _____
B newton	(ii) Chemical potential energy _____
C newton-metre	(iii) Momentum of a car _____
D kilogram metre per second	(iv) Electrical energy _____
E kilowatt-hour	(v) Speed of a car _____
F watt	(vi) Work done _____
G metre per second	(vii) Pressure _____
H metre per second squared	(viii) Density _____
I newton per second squared	(ix) Gravitational force _____
J kilogram per metre cubed	(x) Acceleration _____

Question 9

This question is about S.I. units and S.I. unit symbols.

Match the SI units or SI symbols with the physical quantity measured by placing the letter from **column A** in the blank space in **column B**.

Column A	Column B
A volt (V)	_____ electrical energy consumed
B ampere (A)	_____ rate of energy
C joules (J)	_____ moment
D watts (W)	_____ resistance
E kilogram metre per second (kg m/s)	_____ momentum
F ohms (Ω)	_____ energy
G metre per second squared (m/s^2)	_____ acceleration
H newton metre (Nm)	_____ force
I kilowatt h (kWh)	_____ joule per coulomb
J Newton (N)	_____ coulomb per second