

Name **ANSWER KEY**

Date

Mr Rawson



Intro 1: Prefixes and Sig Figs

1. Significant figures

(a) How many significant figures are in the following measurements?

i. 330,000,000 m·s⁻¹ **2**

ii. 22.22 °C **4**

iii. 0.0276 °C **3**

iv. .004 J **1**

v. .5050 MHz **4**

vi. 3.008 s **4**

vii. 0.0002 mm **1**

2. Units

(a) Fill in the chart below for the prefixes:

Power	Prefix	Abbreviation	Sample object of similar size
10 ¹²	Tm	Tera	
10 ⁹	Gm	Giga	
10 ⁶	Mm	Mega	
10 ³	km	kilo	
10 ⁰	m	meter	
10 ⁻²	cm	centi	
10 ⁻³	mm	milli	
10 ⁻⁶	μm	micro	
10 ⁻⁹	nm	nano	

3. Prefixes

(a) Convert each of the following to the units requested. Do not forget to use the correct symbol.

1 millimeter expressed in meters	0.001
17 grams expressed in micrograms	17,000,000
0.65 kilometers expressed in centimeters	65,000
0.5 milligrams expressed in grams	0.0005
468 micrometers expressed in centimeters	.0468
2 hours 10 minutes expressed in seconds	7800

4. Which one of the following contains three fundamental units? If you have never seen the unit before, research it to find the answer.

A.	Metre	Kilogram	Coulomb
B.	Second	Ampere	Newton
C.	Kilogram	Ampere	Kelvin
D.	Kelvin	Coulomb	Second