SNC2D Task – Scientific Notation Name:

1. Convert the following values INTO scientific notation using the normalized value (decimal place is to the right of the first non-zero digit).

   a. 5,600,000,000
   b. 4,900
   c. 35
   d. 1,200,000,000,000,000,000
   e. 0.005
   f. 0.000,000,008,6
   g. 0.623

Prefix	Abbreviation	Value
peta	P	10^{15}
tera	T	10^{12}
giga	G	10^{9}
mega	M	10^{6}
kilo	k	10^{3}
hecto	h	10^{2}
deca	da	10^{1}
deci	d	10^{-1}
centi	c	10^{-2}
milli	m	10^{-3}
micro	μ	10^{-6}
nano	n	10^{-9}
pico	p	10^{-12}
femto	f	10^{-15}

2. Convert the following into standard number format (remove the scientific notation).

   a. 4.5×10^{8}
   b. 17.65×10^{14}
   c. 2.6×10^{-10}
   d. 428.5×10^{-6}
   e. 0.005×10^{9}
   f. 114.5×10^{14}
   g. $37{,}774.5 \times 10^{-13}$

3. Complete the table with the missing information for each line (all base units are meters, m).

Standard Number	Scientific Notation	Number with Prefix on units
45 000 m	4.5×10^{3} m	45 km
	3.2×10^{-6} m	
		5 Gm
0.000,000,007,8 m		
	450×10^{-12} m	
		75 fm
120.45		

4. Multiply the following together WITHOUT using a calculator, leave your answers in Scientific Notation.
   a. (5,000,000,000) x (2,000)
   b. (0.000,000,4) x (0.000,003)