

Name _____ Period _____

College Prep Chemistry of the Earth

Assignment 6H – *Ideal Gas Law*

20 Points

Complete the following problems based on the ideal gas law

<i>Ideal Gas Law Forms</i>	$P = \frac{nRT}{V}$	$V = \frac{nRT}{P}$	$n = \frac{PV}{RT}$	$T = \frac{PV}{nR}$
$PV = nRT$				
Ideal Gas Constant [R]	$R = 0.0821 \frac{\text{L}\cdot\text{atm}}{\text{mol}\cdot\text{K}}$			

P = 1.48atm, V = 32.48L,
n = 2.45mol, T = ____K

T =		
T =		

P = 6.39atm, V = 21.82L,
n = ____mol, T = 428.43K

n =		
n =		

P = ____atm, V = 26.74L,
n = 0.93mol, T = 327.38K

P =		
P =		

P = 0.82atm, V = ____L,
n = 0.52mol, T = 283.58K

V =		
V =		

P = 3.47atm, V = 51.93L,
n = ____mol, T = 475.25K

n =		
n =		

P = 5.27atm, V = ____L,
n = 4.38mol, T = 538.49K

V =		
V =		

P = ____ atm, V = 42.50L,
n = 3.74mol, T = 613.58K

P =	
P =	

P = 21.85atm, V = 6.28L,
n = 0.94mol, T = ____ K

T =	
T =	