

Name _____ Period _____

College Prep Chemistry of the Earth

Assignment 7D – Temperature Conversions and Conversion Review

20 Points

Answer the following questions

What is temperature?	What is absolute temperature?
What is the unit for absolute temperature, and what is the relationship to celsius?	What is absolute zero?

Temperature Conversions

Conversion Factors	$K = ^\circ C + 273.15$	$^\circ C = K - 273.15$
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Convert 42.59°C to K	
K =	
K =	

Convert 263.48K to °C	
°C =	
°C =	

Convert -10.34°C to K	
K =	
K =	

Convert 329.84K to °C	
°C =	
°C =	

Convert 392.44 °C to K	
K =	
K =	

Convert 38.42K to °C	
°C =	
°C =	

Gas Unit Conversion Review

Conversion Factors	$1\text{ atm} = 760\text{ mmHg} = 760\text{ torr}$ $101.3\text{ kPa} = 14.7\text{ psi}$	$1\text{ L} = 1000\text{ mL}$
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Convert $1.85\text{ atm H}_2(\text{g})$ to $\text{mmHg H}_2(\text{g})$	
$\text{mmHg H}_2(\text{g}) =$	

Convert $382.4\text{ kPa NO}_3(\text{g})$ to $\text{atm NO}_3(\text{g})$	
$\text{atm NO}_3(\text{g}) =$	

Convert $7242.4\text{ mmHg HCl}(\text{g})$ to $\text{kPa HCl}(\text{g})$	
$\text{kPa HCl}(\text{g}) =$	

Convert $1028.38\text{ mmHg F}_2(\text{g})$ to $\text{torr F}_2(\text{g})$	
$\text{torr F}_2(\text{g}) =$	

Convert $739.28\text{ mL SO}_2(\text{g})$ to $\text{L SO}_2(\text{g})$	
$\text{L SO}_2(\text{g}) =$	

Convert $2.68\text{ L HF}(\text{g})$ to $\text{mL HF}(\text{g})$	
$\text{mL HF}(\text{g}) =$	