

ABG WORKSHEET

NORMAL VALUES:

pH: _____

pCO₂: _____

HCO₃: _____

Interpret the following ABGs and identify one pathophysiological cause for this type of acid-base imbalance.

ABG Values	Interpretation	Cause
pH 7.20 pCO ₂ 37.5 HCO ₃ 18		
pH 7.45 pCO ₂ 28 HCO ₃ 20		
pH 7.56 pCO ₂ 52 HCO ₃ 28		
pH 7.31 pCO ₂ 50 HCO ₃ 26		
pH 7.19 pCO ₂ 34 HCO ₃ 16		
pH 7.22 pCO ₂ 55 HCO ₃ 23		

ABG WORKSHEET

Answer Key:

NORMAL VALUES:

pH: 7.35 - 7.45

pCO₂: 35 - 45

HCO₃: 22-28

Interpret the following ABGs and identify one pathophysiological cause for this type of acid-base imbalance.

ABG Values	Interpretation	Cause
pH 7.20 pCO ₂ 37.5 HCO ₃ 18	Metabolic Acidosis	Renal Failure DKA Diarrhea
pH 7.45 pCO ₂ 28 HCO ₃ 20	Respiratory Alkalosis	CHF Pulmonary Embolism Asthma
pH 7.56 pCO ₂ 52 HCO ₃ 28	Metabolic Alkalosis	NG Suction Vomiting
pH 7.31 pCO ₂ 50 HCO ₃ 26	Respiratory Acidosis	Overdose CNS Disorder Respiratory Failure
pH 7.19 pCO ₂ 34 HCO ₃ 16	Metabolic Acidosis	Renal Failure DKA Diarrhea
pH 7.22 pCO ₂ 55 HCO ₃ 23	Respiratory Acidosis	Overdose CNS Disorder Respiratory Failure