

## LVN-RN Acid Base Worksheet

### KEY

Please indicate if the following are Respiratory Acidosis, Respiratory Alkalosis, Metabolic Acidosis, or Metabolic Alkalosis. Also indicate if we have no compensation, partial compensation, or full compensation.

- |    |                  |      |                                     |
|----|------------------|------|-------------------------------------|
| 1. | pH               | 7.21 | Metabolic Acidosis: No compensation |
|    | CO <sub>2</sub>  | 35   |                                     |
|    | HCO <sub>3</sub> | 16   |                                     |
  
- |    |                  |      |                                      |
|----|------------------|------|--------------------------------------|
| 2. | pH               | 7.52 | Metabolic Alkalosis: No compensation |
|    | CO <sub>2</sub>  | 40   |                                      |
|    | HCO <sub>3</sub> | 32   |                                      |
  
- |    |                  |      |                                     |
|----|------------------|------|-------------------------------------|
| 3. | pH               | 7.31 | Metabolic Acidosis: No compensation |
|    | CO <sub>2</sub>  | 60   |                                     |
|    | HCO <sub>3</sub> | 22   |                                     |
  
- |    |                  |     |  |
|----|------------------|-----|--|
| 4. | pH               | 7.6 | Respiratory Alkalosis: No compensation |
|    | CO <sub>2</sub>  | 30  |  |
|    | HCO <sub>3</sub> | 26  |  |
  
- |    |                  |      |                                   |
|----|------------------|------|-----------------------------------|
| 5. | pH               | 7.35 | Respiratory Acidosis: Compensated |
|    | CO <sub>2</sub>  | 64   |                                   |
|    | HCO <sub>3</sub> | 32   |                                   |
  
- |    |                  |      |                                    |
|----|------------------|------|------------------------------------|
| 6. | pH               | 7.45 | Respiratory Alkalosis: Compensated |
|    | CO <sub>2</sub>  | 27   |                                    |
|    | HCO <sub>3</sub> | 20   |                                    |
  
- |    |                  |      |                                 |
|----|------------------|------|---------------------------------|
| 7. | pH               | 7.38 | Metabolic Acidosis: Compensated |
|    | CO <sub>2</sub>  | 27   |                                 |
|    | HCO <sub>3</sub> | 16   |                                 |
  
- |    |                  |      |                                  |
|----|------------------|------|----------------------------------|
| 8. | pH               | 7.43 | Metabolic Alkalosis: Compensated |
|    | CO <sub>2</sub>  | 56   |                                  |
|    | HCO <sub>3</sub> | 33   |                                  |

LVN-RN Acid Base Worksheet

9. pH 7.31 Respiratory Acidosis: partially compensated  
CO<sub>2</sub> 52  
HCO<sub>3</sub> 30
10. pH 7.53 Respiratory alkalosis: partially compensation  
CO<sub>2</sub> 28  
HCO<sub>3</sub> 18
11. pH 7.22 Metabolic Acidosis: partial Compensation  
CO<sub>2</sub> 26  
HCO<sub>3</sub> 14
12. pH 7.56 Metabolic Alkalosis: partial compensation  
CO<sub>2</sub> 51  
HCO<sub>3</sub> 35
13. pH 7.43 Metabolic Alkalosis: partial compensation  
CO<sub>2</sub> 50  
HCO<sub>3</sub> 32
14. pH 7.50 Metabolic Alkalosis: no compensation  
CO<sub>2</sub> 36  
HCO<sub>3</sub> 27
15. pH 7.42 Respiratory Alkalosis: Compensated  
CO<sub>2</sub> 16  
HCO<sub>3</sub> 10
16. pH 7.52 Respiratory Alkalosis: not compensation  
CO<sub>2</sub> 30  
HCO<sub>3</sub> 24
17. pH 7.50 Respiratory Alkalosis: no compensation  
CO<sub>2</sub> 30  
HCO<sub>3</sub> 23

LVN-RN Acid Base Worksheet

18. pH 7.30 Respiratory Acidosis: no compensation  
CO<sub>2</sub> 55  
HCO<sub>3</sub> 26
19. pH 7.51 Respiratory Alkalosis: partially compensated  
CO<sub>2</sub> 18  
HCO<sub>3</sub> 14
20. pH 7.33 Metabolic Acidosis: no compensation  
CO<sub>2</sub> 38  
HCO<sub>3</sub> 19
21. pH 7.29 Respiratory Acidosis: no compensation  
CO<sub>2</sub> 49  
HCO<sub>3</sub> 23
22. pH 7.22 Metabolic Acidosis: partial compensation  
CO<sub>2</sub> 23  
HCO<sub>3</sub> 9
23. pH 7.28 Metabolic Acidosis: partial compensation  
CO<sub>2</sub> 18  
HCO<sub>3</sub> 8
24. pH 7.33 Metabolic Acidosis: partial compensation  
CO<sub>2</sub> 15  
HCO<sub>3</sub> 8
25. pH 7.46 Metabolic Alkalosis with some respiratory acidosis  
CO<sub>2</sub> 57  
HCO<sub>3</sub> 39