**Chemistry B Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Solutions**

**Period\_\_\_\_\_\_\_\_**

1. Why isn’t distilled water a good conductor of electricity?

2. When sugar is placed in water it dissolves. Explain this dissolving process.

3. Why is salt thrown on icy steps and roads in the winter?

4. How would drinking seawater affect the aqueous equilibrium in the body?

5. Gatorade and other sports drinks claim to contain electrolytes. Explain what this means.

6. Why is salt used in the making of ice cream? Explain!

7. Explain why some sunglasses have the ability to turn darker or lighter depending on the intensity of the sun.

8. Give an everyday example of an equilibrium reaction and explain how it works.

9. Cobalt chloride is often used as a humidity indicator. Explain how this works.

10. Explain why BaSO4 is used in digestive tract x-rays.

11. When people suffer from dehydration, their hearts must beat harder to maintain circulation. Why?

12. Siphoning gasoline is an old (and not very safe) practice. Explain how gasoline can go from full tank to an empty tank or can.

13. Some people stranded at sea have survived more than 100 days. Explain what methods they could have used to obtain drinkable water.

14. In northern Utah the temperature falls well below freezing in the winter. Would you expect the Great Salt Lake to be safe for ice-skating? Explain!

15. Give at least 5 reasons why the flow of chemical solutions (pollution) into major lakes and oceans needs to be closely monitored and controlled.

16. When you touch an appliance that has a short circuit, and electric current travels through your body giving you a shock. Explain how this can happen in the human body.

17. Sports medicine utilizes hot and cold packs. Explain how this works and suggest the best substances to use.

18. Explain why cold or hot packs are used for injuries.

19. Explain where gasoline for your car comes from and how it is refined.

20. Explain how antifreeze in your car’s radiator works. What is the best mixture?

21. In terms of osmotic pressure, explain why a plant will wilt if placed in a sugar or salt solution that is more concentrated than that inside the plant.