**Chapter Questions for “Napoleon’s Buttons”**

**Chapter 15: Salt**

1. Describe 3 methods of salt productions. Detail each process in your description.
2. What makes sea salt a lower quality than brine salt or rock salt?
3. How did salt production largely contribute to the deforestation of parts of Europe?
4. What is halite? Where is it found? What are some of its characteristics?
5. How has salt mining impacted tourism in countries that manufactured it?
6. How did the salt trade affect the cultures of countries around the world? Give at least three examples.
7. How did salt affect the fishing industry?
8. How has salt played an important role in deciding the outcome of wars? Give at least three examples.
9. Why do saline solutions conduct electricity while regular water does not?
10. Explain in detail why sodium chloride is particularly soluble in water. How does this characteristic make salt such an excellent preservative?
11. Explain, giving specific examples, why salt is so vital in maintaining healthy human body processes.
12. Where do carnivores obtain their salt?
13. What was gabelle? Where was it instituted? When was it eliminated? What were its lasting effects?
14. Explain Britain’s tactics involving salt in India. Who put an end to this unfair practice? How?
15. Give two examples of chemicals produced using NaCl as a starting material. Give a brief summary of how each chemical is formed.

**Chapter 16: Chlorocarbon Compounds**

1. Explain how ice keeps surrounding materials cool. Contrast this method to that of refrigeration. What puts the “re” in refrigeration?
2. What is a refrigerant? What are some of the special requirements of a refrigerant? What were some of the early refrigerants?
3. What molecules were developed to replace early refrigerants? What benefits did these molecules have over their predecessors?
4. Explain the numbers in Freon names.
5. Where else did CFC’s find a nitch?
6. Explain the cycle of ozone production.
7. Explain in detail how CFC’s blocked this natural cycling of ozone. What are some of the long term effects of widespread CFC use?
8. Pick two examples listed in the book of dangerous compounds containing chlorine and give a detailed account of why they were first created. What made them toxic? What lasting effects will they have on the environment?
9. What was the first chemical ever used to induce narcosis? What chlorine containing molecule eventually replaced it? What was this new molecule’s advantage over the first?
10. What was Twilight Sleep? Why was this chosen as a method of anesthesia specifically for childbirth? What were some of the drawbacks?

**Chapter 17: Molecules vs. Malaria**

1. How is malaria transmitted? What causes malaria? What makes malaria such a serious concern?
2. What is quinine? Where can it be found? How did it gain popularity as a cure for malaria?
3. What problem quickly developed as cinchona bark became more popular? What possible solutions existed for this problem?
4. When was the first successful laboratory synthesis of quinine? Who synthesized the molecule?
5. Briefly describe the plasmodium parasite life cycle.
6. What were some of the pros and cons of spraying DDT to help control mosquito populations?
7. Describe the relationship between malaria and sickle cell anemia.
8. Name three lasting impacts of malaria evident in our world today.