

Name: _____

The Disappearing Spoon
Part IV (Chapters 12-15)

Chapter 12: Political Elements **Cm Po Lu Hf Pa La Mt**

1. Marie and Pierre Curie and their daughter all died tragically. How did each of them die?
2. Marie Curie discovered what two elements? What element is named after her? How many of these elements are radioactive?
3. **Research:** What is a medical tracer?
4. How did Hevesy cleverly “hide” two gold Nobel Prize medals from the Germans?
5. Summarize the collaboration of Otto Hahn and Lise Meitner.

Chapter 13: Elements as Money **Zn Au Te Eu Al**

1. What does the word “transmute” mean?
2. What is the chemical formula for fool’s gold?
3. Explain how europium helps stop counterfeiting.
4. Why is it anachronistic (out of chronological order, especially a practice from earlier times) that aluminum is still on top of the Washington Monument?

5. If gold or platinum were very easy to get, what would happen to their price? How is this related to the story of aluminum?

Chapter 14: Artistic Elements **Dy Pr Sr Ru Ra Li**

1. Who was Johann Von Goethe? Was he a great scientist? Why or why not?

2. How was Dobereiners triads the precursor to the periodic table? Why might iron, nickel, and cobalt be considered a related triad (beyond the fact that they are metallic?)

3. What does the author mean when he says Mark Twain was prescient on p. 250?

4. What did the poet Robert Lowell mean when he said that his brain lacked a little salt?

Chapter 15: An Element of Madness **Se Mn Pd Ba Rg**

1. What was unique about William Crookes? How was he influential in the discovery of certain elements?

2. How is a megalodon like Bigfoot? How is it different?

3. What does it mean to be a pathological scientist?

4. What is “cold fusion?” How is it similar to the attempt to develop perpetual motion machines (machines that can run forever without input of energy)?

5. What did William Rontgen discover? How was his reaction to his discovery very different from the reaction of Pons and Fleischman to their “discovery?”

Summary: Write down 5 facts from Part IV that you found interesting.

1.

2.

3.

4.

5.

Reflection: Write at least a 5 sentence paragraph about your reaction to the book thus far up through Part IV. Include evidence from the book to support your reaction. After reading the book thus far, are there any additional questions that are coming to your mind about any topics being covered that you want to know more about?

