

The Alchemy of Air by Thomas Hager

Questions for Book: Answer the questions and resubmit this document to your instructor with the subject line: Alchemy of Air - your name - Intro, Ch. 1 & Ch. 2. Please save this document as AA_01 _your_name

Introduction

1. Humans are mostly oxygen, carbon, hydrogen and nitrogen. Where does our body mostly get each of these elements? (p. xii)
2. What is meant by the statement on p. xiv "the same discovery that could feed the world could also destroy it".
3. Nature offers only two ways of fixing nitrogen. What are they? (p. xiii)
4. How many people approximately could the Earth support under ideal conditions without the use of nitrogen fertilizer? (p. xiii)

(note: If you are not familiar with the 1995 Oklahoma City bombing you will find the story here: http://en.wikipedia.org/wiki/Oklahoma_City_bombing)

Chapter One

1. Sir William Crookes invented the Crookes Tube. What is that? (p. 3)
2. Crookes predicted there was only one way to stop mass starvation that he predicted would begin in the 1930s. What solution did he present?
3. What is fixed nitrogen?

Chapter Two

1. What was the goal of alchemy?
2. What is China Snow or nitre and what name was given to it in the West?
3. What is gunpowder?
4. Visit Ulrich Bretscher's Black Powder Page: <http://www.musketeer.ch/blackpowder/history.html> and read what he writes about the history of Black Powder.
5. What is the chemical difference between salpeter and Chile saltpeter from South America?
6. Read what Wikipedia: http://en.wikipedia.org/wiki/Atacama_Desert has to say about the Atacama Desert and view the images.
7. What is caliche?