

# CHEM1210: Chemistry I

'Modern Chemistry: An Introduction' Part 1 - 20 mins

## 1. The Renaissance

- a.) Name some of the renaissance scientists named.      b.) What is Robert Boyle famous for?

## 2. Joseph Priestley and Henry Cavendish

- a.) Which gases did Priestley discover?      b.) Which element did Cavendish discover?

## 3. Lavoisier and Dalton

- a.) How did Lavoisier disprove the phlogiston theory?      b.) What is 'living fire'?  
c.) How did Dalton's work differ from Democritus's?      d.) Was his evidence direct or indirect?

## 4. Wöhler and Pasteur

- a.) What was the significance of the 'Life-Force' theory?  
b.) How did Pasteur use chemistry to develop his germ theory of disease?

## 6. Mendeleev

- a.) How many elements made up Mendeleev's first periodic table?  
b.) How did Mendeleev know that some elements had yet to be discovered?

## 7. Discovery of X-Rays

- a.) When were X-Rays discovered?      b.) What device was used to produce X-Rays?  
b.) What did Roentgen discover about X-Rays?      c.) What property of U did Becquerel discover?  
d.) What element did Marie and Pierre Curie discover?

'Modern Chemistry: An Introduction' Part 2 - 20 mins

## 8. Shkashiri and Silver

- a.) What is the 'Briggs-Rauscher Reaction'?      b.) What did Dr. Silver discover?

## 9. Bruce Ames

- a.) What is the 'Ames Test'?  
b.) Why would it be difficult to totally reduce our exposure to carcinogens by banning certain carcinogenic man-made chemicals?  
c.) Why is there a widely held public misconception that there are more synthetic carcinogenic chemicals than naturally occurring?

## 10. Donald Huffman

- a.) What are Buckyballs?  
b.) How are Buckyballs made and purified?  
c.) What is special about the inside of a Buckyball?