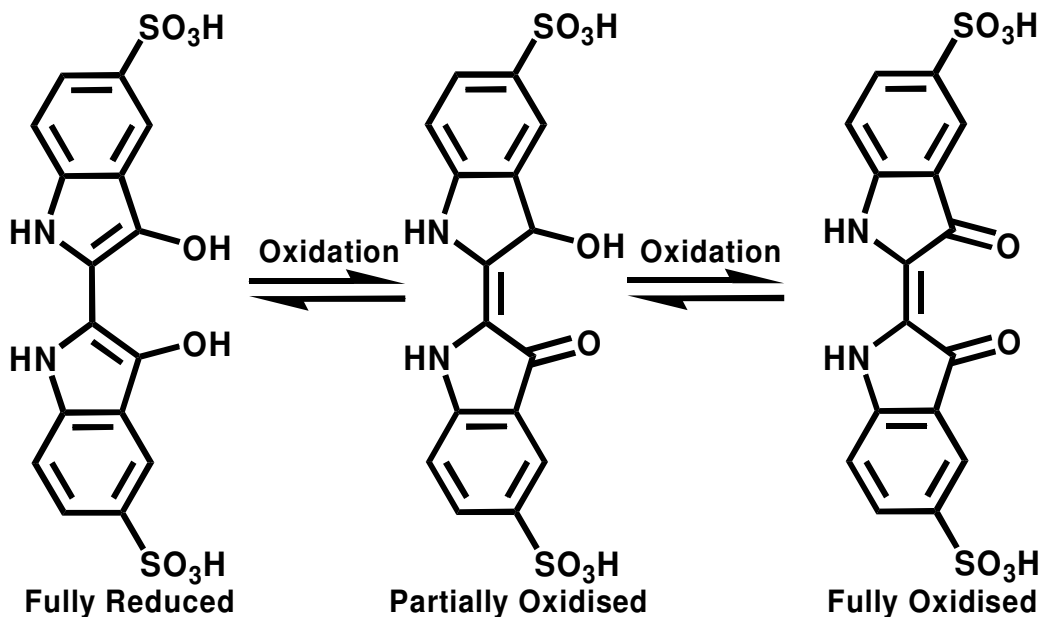




Name..... Class.....

1. The full structural formulae for the three different forms of indigo carmine are shown below. Label the molecules either red, yellow or green according to the colours of the reduced/oxidized/partially oxidized states.



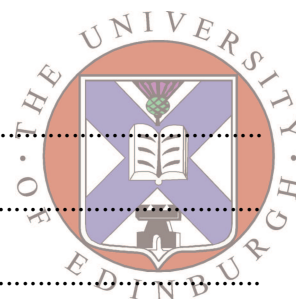
2. Complete the following with the words “loss” or “gain”:-

**Oxidation Is** ..... of electrons  
 ..... of hydrogen  
 ..... of oxygen

**Reduction Is** ..... of electrons  
 ..... of hydrogen  
 ..... of oxygen

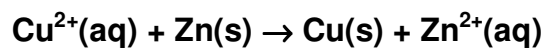
3. What causes the oxidation of the indigo carmine?.....

.....  
 .....



4. What causes the reduction of the indigo carmine?.....  
.....  
.....

5. Another example of a redox reaction is shown below.



Which species are:-

- a. Oxidised?.....
- b. Reduced?.....
- c. An Oxidising Agent?.....
- d. A Reducing Agent?.....