

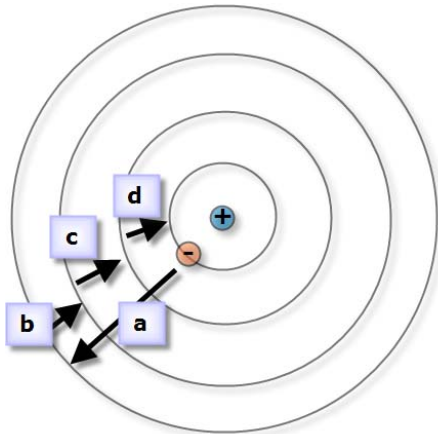




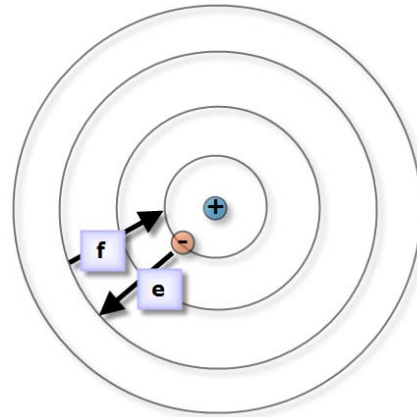
3 Look at the graphic below (this represents a group of hydrogen atoms). Knowing that both processes are happening at the same time, determine:

- the jumps in which the electron takes energy
- the jumps in which the electron releases energy
- draw all those jumps and the ionization energy in an energy diagram
- the placement of all emitted photons (UV, visible, IR regions)

50 % of hydrogen atoms undergo this process:

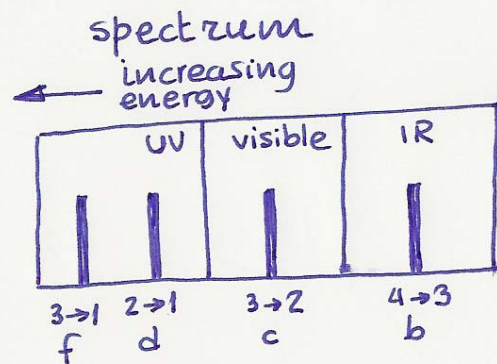
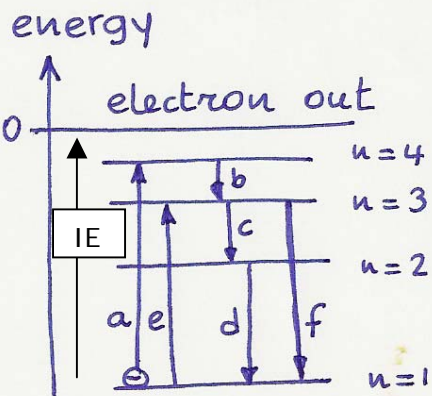


50 % of hydrogen atoms undergo this process:



The electron ...  
takes energy  
releases energy

... in jumps ...  
"a", "e"  
"b", "c", "d", "f"



4	<p>Identify (indicating the number) the following elements in the periodic table below</p> <p>a) the element with the symbol "O"  b) the element with the symbol "F"  c) the element with the symbol "Na"  d) the element with the symbol "He"  e) the element with the symbol "P"  f) the element of the third period that forms a monpositive ion  g) the element of the second period that forms a mononegative ion  h) the element of the third period that forms a two positive ion  i) the element of the second period that forms a two negative ion  j) the element with the electron configuration <math>1s^2 \dots 3s^2 3p^3</math>  k) the element with the electron configuration <math>1s^2 \dots 4s^2</math></p>					
<p>a) 8      b) 9      c) 11      d) 2      e) 15</p> <p>f) 11      g) 9      h) 12      i) 8      j) 15      k) 20</p>						

