

PURPOSE: WHAT DID

NIELS BOHR GIVE  
AS AN EXPLANATION  
FOR BUNSEN'S "BROKEN  
RAINBOW"?

#1 CLASSICAL  
PHYSICS

Put any amount of  
energy in.

Get any amount of  
energy out

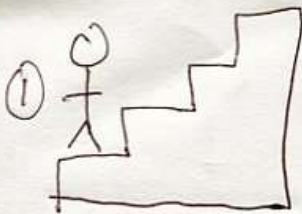
# #2 Quantum Physics

Put only certain  
energies into something

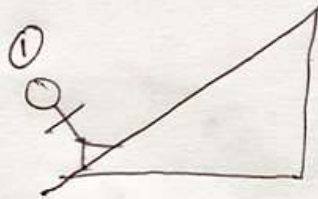
Get out only certain  
energies

things that are  
Quantized

things that are  
NON  
quantized

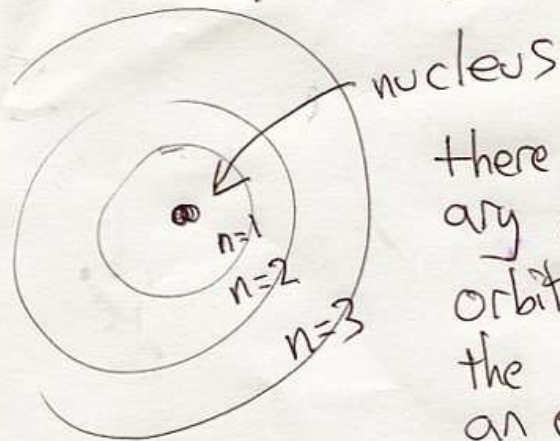


② American  
Money



② human  
height  
③ weight

#3 NIELS BOHR SAID THE  
STRUCTURE OF ATOMS  
ELECTRONS MUST BE  
QUANTIZED.

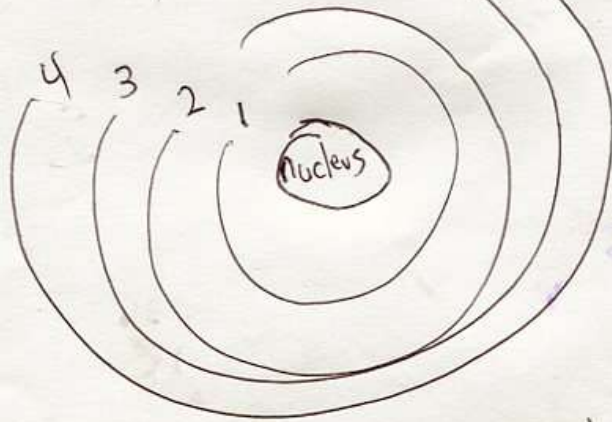


there are imagin-  
ary circles called  
orbits; these are  
the only place  
an  $e^-$  can  
go



## ATOMS & ELECTRONS

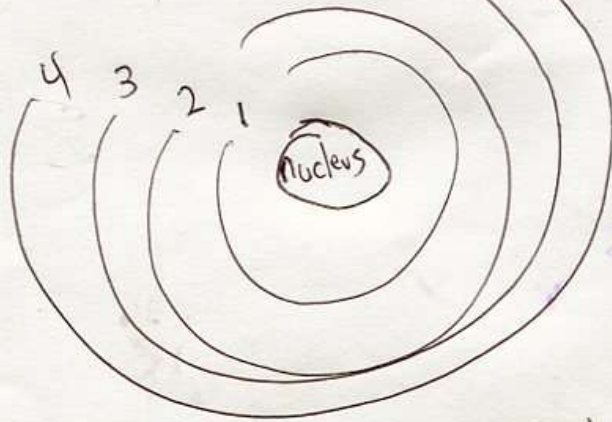
A) ~~Settings~~ are specific



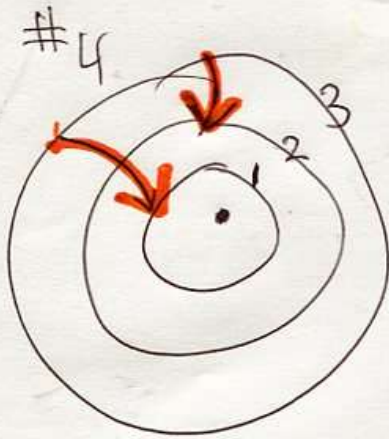
ELECTRONS CAN  
ONLY BE IN  
CIRCLES AROUND  
THE NUCLEUS  
CALLED "ORBITS"

# ATOMS & ELECTRONS

A) ~~Settings~~ are specific



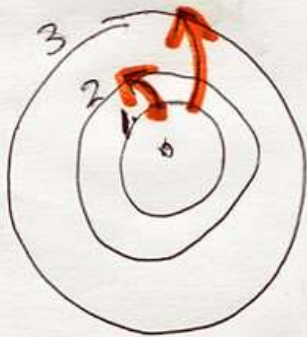
ELECTRONS CAN  
ONLY BE IN  
CIRCLES AROUND  
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CALLED "ORBITS"



When  $e^-$  falls  
closer, it  
gives off  
energy

$3 \rightarrow 2$  small  
energy

$3 \rightarrow 1$  big  
energy



When you hit  
the atom with  
energy,

$1 \rightarrow 2$  small  
absorption  
of energy

$1 \rightarrow 3$  large  
absorption  
of energy