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| ***How to make an apparatus for sensing Volatile organic compounds (VOC) –***  ***WORKSHEET*** | | | |
| ***Material and tools:***   * *Multimeter* * *Breadboard* * *DC source 5V-9V* * *Electrical wires* * *VOC sensor (TGS 2620)* * *Resistor 1 kΩ* * *Resistor 47 kΩ* * *LED* | | *E:\ŠKOLA\2014_2015\PROJEKTI\projekt Erasmus+\OER - Air Quality\DSCN0032.JPG* | |
| ***Photo and schematics of the aparatus*** | | *E:\ŠKOLA\2014_2015\PROJEKTI\projekt Erasmus+\OER - Air Quality\DSCN0007.JPG*  *E:\ŠKOLA\2014_2015\PROJEKTI\projekt Erasmus+\OER - Air Quality\SHEMA.jpg* | |
| ***Instructions*** | ***Tools and materials*** | | ***Photo instructions*** |
| 1. *Pin on the breadboard:*  * *LED at + electrode in B21 and – electrode in B22* * *Connect the resistor with the 1kΩ resistance with the + electrode and A21 pin* * *Connect pin A22 and - electrode* | * *LED diode* * *Resistance 1kΩ* * *Electronic wire* | |  |
| 1. *Pin on the breadboard:*  * *47kΩ resistor from E2 to - line* * *Connect with wires - lines (directly or how it’s showed on the picture)* | * *Resistor 47kΩ* * *Electronic wires* | |  |
| 1. *Pin on the breadboard:*  * *VOC sensor with it’s nodge turned towards the middle of the board; legs A,B,C and D into lines 1,2,3 and 4* * *Wire from A1 to the - line* * *Wire from A3 to the + line* * *Wire from A4 to the + line* | * *VOC sensor* * *Electronic wires* | |  |
| 1. *Connect voltmeter on the breadboard:*  * *Connect multimeter terminal VΩmA with red wire to - line* * *Connect multimeter terminal COM with black wire to A2* | * *Multimeter* * *Red wire* * *Black wire* | |  |
| 1. *Connect DC current source in the electrical circuit in the following way:*  * *+ line on + electrode* * *- line on - electrode* | * *DC current source* | |  |