



Quiz # 6 - Section XBG – Team # 7 - Grade = 3

M	ID #	Name
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Design a Garbage Recycling Facility.

For the design project stated above:

1. Construct a morphological chart and use it to identify potential design alternatives. Create at least one hundred alternatives. **1.5 points**
2. How many alternatives are included? Show your calculation. **0.5 point**
3. Mention one feasible design alternative and another infeasible one (by shading the desired cells or by writing the alternatives in a separate line). **1 point**

Functions	Means					
collects garbage	Garbage truck	Recycling bins	Sanitary worker			
Recycles garbage	Makes new paper	Makes Wood-Plastic- composite (WPC)	Makes new cans	Makes new plastic	Makes new machines i.e. phones	Makes new tissue
Divided storage based on material	Plastic	paper	aluminum	Tetra pack		
Separates garbage	Paper centrifuge	Different colored bins	magnet	robot		
Protects the environment	Sealed bins made of environmentally-friendly materials	Facility located away from residents	Environment ally-friendly machines			

(Number of alternative: $3*6*4* 4*3= 864$ alternatives.)

- The gray highlight resembles a feasible alternative which is: (Recycling bins- Makes Wood-Plastic- composite (WPC) – Tetra pack –Paper centrifuge -Sealed bins made of environmentally-friendly materials).



- The **yellow highlight** resembles an infeasible alternative which is: (Sanitary worker - Makes new machines i.e. phones – aluminum – robot - Environmentally-friendly machines).