## <u>Cut</u> these cards out along the lines. <u>Glue</u> them unto their appropriate boxes and then unto your ISN.

<u>Definition</u> : Factors or rules that <u>LIMIT</u> a solution. Usually: money, materials, size, resources. The solution is unacceptable if these are rules are not met.  "LIMITS / RULES"	<u>Definition</u> : Characteristics that a design or solution should have. These characteristics are <i>IDEAL</i> or <i>IMPORTANT</i> , and are goals that the design or solution are trying to reach.  "WANTS / GOALS"
The engineer is making a <u>drum</u> <u>kit</u> for a video game. The drum kit should look and feel like a real drum set.	The engineering team needs to create a design for a <u>scooter</u> .  The company hiring the team wants the scooter to be made from recycled materials.
The student engineers must build a <u>tower</u> <u>made out of spaghetti noodles</u> . The students may only use 25 spaghetti noodle sticks. They will not get any extra.	The engineering team needs to create a design for a <u>scooter</u> .  The company hiring the team gave them a budget of \$30. If they go over \$30 the design will be rejected.
The engineer is buying a <u>car</u> . The car must not cost more than \$25,000. If it is more money, the engineer can not buy it.	The engineer is making a <u>drum</u> <u>kit</u> for a video game. The drum kit must not sound like a real drum set because that is too loud. If it is too loud, nobody will buy it.
The student engineers must build a <u>tower</u> <u>made out of spaghetti noodles</u> . Their goal is to make the tower very tall.	The engineer is buying a <u>car</u> . The engineer would like the car to be blue.