Example Project Requirements & Constraints

See below for definitions and examples...

Definitions

Requirement:
What a particular product or service should do. It is a statement that identifies a necessary attribute, capability, characteristic or quality. In engineering, sets of requirements are inputs into the design stages of product development.

Constraint:
A restriction or limitation on the degree of freedom one has in providing a solution to problem or challenge.

Example Requirements (examples taken from different projects)
According to our client, the product we design must:
• Have four dome quadrants to measure the peripheral vision of a child
• Have independently-controlled water faucets
• Be able to be turned on/off by a child
• Cost less than $20 to produce
• Be recyclable

Example Constraints (examples taken from different projects)
The product must meet the requirements under the following constraints:
• Must have at least one light in each of the four dome quadrants
• Operator/tests limited to choose between warm or cold water temperature
• Limited strength of children
• Budget and materials: as limited by teacher and school