

NAME \_\_\_\_\_

Due: \_\_\_\_\_

Points: \_\_\_\_\_ / 20 (Assessments)

### **HOMEWORK: SURVEY (House of Quality Start)**

Read chapter 6 from the reference text. Re-read sections 6.-1 through 6.4.

Begin construction of a House of Quality (HOQ) for your design problem (getting from state A to state B), by identifying your customers and creating a survey. (i.e., complete STEPS 1 and 2). Submit a survey, Instructor will complete the survey and solicit additional responses (students will do the same).

It is very important to initially focus on WHAT you need to design, and subsequently, only after that is understood, shift your focus to HOW the design will work and look. Focus on FUNCTION, ... followed by FORM. Identify the Customers of your product using guidance from 6.2. Based on your Customers, prepare a survey in accordance with the guidance provided in Chapter 6.3 Steps 2.1 through 2.6. (You will complete Step 2.7 upon survey turn-in). As a text suggests, your survey should start with a problem statement. Also, briefly describe your identified customers, and solicit additional.

Recall:

Step 1: Identify the Customers, Who Are They? (Complete, with Survey and Survey Submission)

Step 2: Determine the Customers' Requirements: What do the Customers Want? (Use Survey Results)

Step 3: Determine Relative Importance of the Requirements: WHO versus WHAT

(use fixed sum method ,  $\Sigma=100$ ).

Completion of these steps will start the construction of the “west wing” of your HoQ. Prepare to identify at least 5-10 design criteria and rank those criteria using concepts from chapter 6 (weighting using the fixed sum method).

*Note: Review Table 6.1 ... “Customers” is a broad term. You must meet regulatory requirements. If you’re designing a better George Foreman Grill, it should be UL Listed. If you’re designing a new artificial heart, you need FDA approval.*