Design a flow chart for a process

Science, Physics

Design a flow chart for a process Zoey Johnson University of Phoenix OPS/571 October 27, 2012 One process that seems to be a never ending process in my daily life is doing laundry. With a household of six people, the laundry needs to be done daily or else it will overtake the house quickly. To help illustrate the laundry process I have used Microsoft Word to create a flowchart that depicts the process. Using flowcharts is valuable because the flow of logic is shown throughout the process. Much like a blueprint for a building, a flowchart depicts the development of a process.

Factors that affect the process design Water temperature and water level are the factors that affect process of the design. Both factors will determine how the laundry gets done. Performing the process design for laundry is broken down into the following steps. 1.) Sort the clothes between whites, light colors, and dark colors 2.) Check that the pockets are empty a. If pockets are empty move to step 3 b. If pockets are not empty, empty them then move to step 3 3.) Measure out the desired amount of detergent 4.) Pour the detergent into the washer .) Determine if fabric softener is needed. If needed, measure and add. If not go straight to step 6 c. Add Fabric Softener 6.) Select water temperature. If clothes are temperature sensitive move to step 7, if not move to step 8 7.)

Are clothes durable, like cotton d. If Yes use hot water e. If No use cold water 8.) Determine Washing cycle f. If fabrics are delicate select gentle wash g. If fabrics are not delicate select normal wash 9.) Adjust the water level per load 10.) Load the clothes into the washer 11. Turn on washer and wait 35 – 45 minutes for wash cycle 12.) Take clothes out of washer and put into dryer 13.) Turn on dryer and wait 60 minutes 14.) Take clothes out of dryer and

fold For the flow chart design, the oval shapes represent the start and end steps for the process. The rectangular shapes represent the process steps. Decision steps are depicted by a diamond shape. Arrows are used to act as a guide to show the flow of process. Identify metric to measure process For the purpose of the laundering process, I have chosen sorting time as the metric for the process.

Separating everyone's laundry into whites, light colors, and dark colors is a time consuming process that can be reduced to reduce the amount of time it takes to do laundry. The remaining steps are fairly automatic so decreasing the sorting time is the best way to improve the process. Start Start Flow Chart Sort clothes by colors: whites, light colors, and dark colors Sort clothes by colors: whites, light colors, and dark colors No No Are pockets empty? Are pockets empty? Empty pockets Empty pockets Yes Yes Measure out desired amount of detergent

Measure out desired amount of detergent Pour Detergent into washer Pour Detergent into washer Is Fabric Softener Needed? Is Fabric Softener Needed? Add Fabric Softener Add Fabric Softener Yes Yes No No Are clothes Durable? Are clothes Durable? Yes Yes Select water temperature. Are clothes temperature sensitive? Select water temperature. Are clothes temperature sensitive? No No Yes Yes Use cold water Use cold water Use hot water Use hot water No No Determine wash cycle. Are fabrics delicate? Determine wash cycle. Are fabrics delicate? No No Yes Yes

Use normal cycle Use normal cycle Use gentle cycle Use gentle cycle Adjust the water level Adjust the water level Turn on washer and wait 35 – 45 minutes for wash cycle to complete Turn on washer and wait 35 – 45 minutes

for wash cycle to complete Load Clothes into washer Load Clothes into washer Take clothes out of washer and load into dryer Take clothes out of washer and load into dryer Turn on dryer and wait 60 minutes for clothes to dry Turn on dryer and wait 60 minutes for clothes to dry Take clothes out of dryer and fold Take clothes out of dryer and fold