

NTI: Day 1

- (Similar to 1.3: Concept Sketching) Referring to your engineering notebook and drawing/sketching guide, create a concept sketch of one of the following items:
 - ✓ Coffee Mug
 - ✓ Cell Phone
 - ✓ Headphones
 - ✓ Computer
 - ✓ Refrigerator

NTI: Day 2

- (Similar to 1.4: Product Development) Pick an item in your home such as a popart box, cereal box, Kleenex box, cleaning product bottle, etc. Brainstorm ways that the makers of this item could alter the item so that nearly all consumers would want to buy their product. Examples include the colors used in the design and the slogans used. You are required to make an entry in your engineering notebook that includes your brainstorming ideas and a sketch of the final product.

NTI: Day 3

- Instant Challenge! You will need two cups filled with water for this assignment. BEFORE YOU COMPLETE THIS CHALLENGE, YOU MUST RECORD YOUR BRAINSTORMING IDEAS IN YOUR ENGINEERING NOTEBOOK. You will begin with a cup filled with water on top of each of your hands. Your goal is to place both cups on the palm of each of your hands without spilling a drop! You CANNOT use your teeth/lips to grab the cup or spread your fingers apart to complete this activity. Be sure to record your solution in your engineering notebook.

NTI: Day 4

- Define the following terms as they relate to engineering:
 - ✓ Engineering
 - ✓ Design Process
 - ✓ Product
 - ✓ Invention
 - ✓ Innovation

NTI: Day 5

- Instant Challenge! You will need a pack of index cards or a pack of playing cards for this assignment. BEFORE YOU COMPLETE THIS CHALLENGE, YOU MUST RECORD YOUR BRAINSTORMING IDEAS IN YOUR ENGINEERING NOTEBOOK. Your goal is to build the tallest tower you can out of your stack of cards or index cards. You will need a minimum of 40 cards to complete this assignment. Draw a sketch of your final tower in your engineering notebook, and record the height of your tower.