



## MEMORANDUM

DATE: September 3, 2015  
TO: King Sahlimon employees  
FROM: King Sahlimon  
SUBJECT: Research and Development Project

### Introductory Summary

You are a member of a research and development team. You are now required to complete the following project. Please choose members of your team wisely and delegate responsibility. Groups of no more than three!!

### Preparation

Each member of your team is required to bring to class sets of multiple items that can be used to construct an object. You may need two sets (one as prototype and one to sell). These items can be large or small, such as wire, wood (pine or soft wood only please), plastic or metal tubing, nuts and bolts, or other types of connectors. You and your group members **cannot** bring tape, glue, lego style toys, Sticky tac or live animals. (Keep in mind that the sets of each item must be identical.) Larger items may be included, but you should remember that the parts must **fit into a box** that can be stored until the sophomores have time to assemble it.

### Assembly

Once you have gathered all of your materials, you need to create an original object using a minimum of 15 items from 5 different sets. Avoid projects that require tools for assembly, unless you wish to include these tools when you ship the product. We expect holes to be drilled, wood to be cut and other procedures requiring the use of power tools to be completed at home.

**Minor pre-assembly allowed only if power tools were required.**

### Instructions

When your product (prototype) is assembled, you must write assembly directions for the consumer. Your instructions should follow the guidelines for instruction writing discussed on class. **Providing a photograph of the finished project is not allowed.** Your first final (rough draft) assembly instructions should be complete and word-processed. This is not a rough draft as much as it is a "first final"; these will be tested on \_\_\_\_\_.

### Test Group

When you have finished preparing your first final assembly instructions, the product will be sent to and evaluated by classmates. The test group will edit and evaluate the instructions so you can finalize your project for the consumer. The test group will write an evaluatory memo (**r&d memo #1**) for both the instructor and the evaluated group. While assembling the product, the evaluation group may want to take notes to aid in the memo writing process. This memo is due the day immediately following the evaluation day. This memo will be used by the creation group to make changes and improvements in their product.

### Finalization

When your final product is ready for shipment, you will **box** it up (unassembled), and we will have some sophomore classes assemble and evaluate. You will prepare two copies of your instructions on the word processor, one will be sent; the other will be handed in. Along with your product and instructions, you will include a **consumer evaluation form**. This form will contain evaluation criteria and questions developed by you to help the consumers in their final evaluation. Your form **must** ask the consumer for **a grade** and specific comments that clarify that grade. Open-ended, easy to analyze questions with comment options will be the most useful.

### Evaluation

You will be evaluated on the following:

- A. Time on task
- B. Ability to work effectively on a team
- C. Meeting deadlines
- D. Quality of assembly instructions
  1. Clarity
  2. Completeness
  3. Reader appeal
  4. Mechanics
- E. Quality of Memo #1 reviewing the R and D project