Software Engineering with LEGO
Clear Communication and the Waterfall Process

Step 1: Requirements Worksheet

Product ID#_____ (copy from the Initial Requirements sheet)

Objective:

Write down complete product requirements as an itemized list. Be sure to incorporate all initial requirements. Add any missing information, if necessary.

Revised requirements:

1.
2.
3.
4.
5.
6.
7.
8.
9.
10.

When done:

Write down the Product ID to the top of this page from the Initial Requirements sheet.
Pass this document to the next team.
Return original requirements to the instructor.

Software Engineering with LEGO
Clear Communication and the Waterfall Process

Step 2: Design Worksheet

Product ID#_____ (copy from the Requirements Worksheet)

Objective:

Design the product based on the updated requirements by drawing a sketch. You may use any combination of side views and/or a 3D view.
Your sketch should include some dimensions/proportions, as necessary.
Your design must not contain any words, but numbers are OK.

Product design:

When done:

Write down the Product ID to the top of this page from the Requirements Worksheet.
Pass this document to the next team.
Return the requirements sheet to the instructor.

Software Engineering with LEGO
Clear Communication and the Waterfall Process

Step 3: Implementation Worksheet

Product ID#_____ (copy from the Design Worksheet)

Objective:

Build a product out of LEGO bricks based on the sketches and the specified dimensions

Do not write/draw anything below this line.

When done:

Write down the Product ID to the top of this page from the Design Worksheet.
Pass the completed product to the next team.
Return the design document to the instructor.

Software Engineering with LEGO
Clear Communication and the Waterfall Process

Step 4: Verification Worksheet

Product ID#_____ (copy from the Implementation Worksheet)

Objective:

Compare the original product requirements with the completed product.
Verify each requirement by testing whether the constructed building meets that requirement.
Write down any inconsistencies/discrepancies you have identified.

Product inconsistencies:

1.
2.
3.
4.
5.
6.
7.
8.
9.
10.

When done:

Write down the Product ID to the top of this page from the Implementation Worksheet.
Be ready for debriefing.