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| **Puzzle Design Challenge Brief**  |

Client: Fine Office Furniture, Inc.

Target Consumer: Ages 3+

Designer: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Problem Statement:

A local office furniture manufacturing company throws away tens of thousands of scrap ¾” hardwood cubes that result from its furniture construction processes. The material is expensive, and the scrap represents a sizeable loss of profit.

Design Statement:

Fine Office Furniture, Inc. would like to return value to its waste product by using it as the raw material for desktop novelty items that will be sold on the showroom floor. Design, build, test, document, and present a three-dimensional puzzle system that is made from the scrap hardwood cubes. The puzzle system must provide an appropriate degree of challenge to a person who is three years of age or older.

Criteria:

1. The puzzle must be fabricated from 27 – ¾” hardwood cubes.
2. The puzzle system must contain exactly five puzzle parts.
3. Each individual puzzle part must consist of at least four, but no more than six hardwood cubes that are permanently attached to each other.
4. No two puzzle parts can be the same.
5. The five puzzle parts must assemble to form a 2 ¼” cube.
6. Some puzzle parts should interlock.