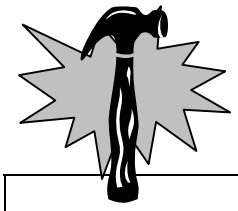
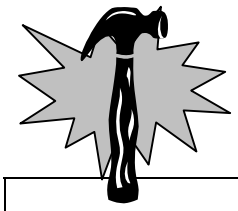


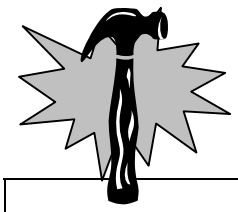
The China Hammer Mission
Section I Team A
Team Roster

Rank	Name
M.I.S.S.	
M.I.S.S.	
M.I.S.S.	
M.I.S.S.	



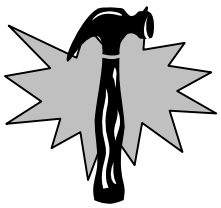
The China Hammer Mission
Section I Team B
Team Roster

Rank	Name
M.I.S.S.	
M.I.S.S.	
M.I.S.S.	
M.I.S.S.	

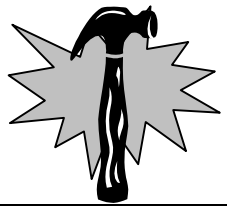


The China Hammer Mission
Section I Team C
Team Roster

Rank	Name
M.I.S.S.	
M.I.S.S.	
M.I.S.S.	
M.I.S.S.	



The China Hammer Mission
Data and Observation Sheet



The China Hammer Mission
Final Material Report

Description:	**Sketch:**

Property Differences	
Original Material	Altered Material

Application for New Material	
Description:	Sketch:

April 8, 2000

To: Materials Inspection and Selection Specialists (M.I.S.S.)
From: Cornell University Materials Laboratories
Re: The "China Hammer" Mystery

Early in the morning of April 1, a graduate student arriving at her lab found a hammer with a ceramic head. An April Fool's trick was suspected, but it was soon discovered that this hammer could drive nails as well as any steel hammer, with no apparent damage to the seemingly brittle ceramic. This was just the beginning. Over the course of the day, several laboratory materials were found to have altered properties. While nobody knew the cause, many speculated on the consequences. Some worried that the altered materials contradicted the physical laws that scientists believe in. Others believed that an explanation could be found, and that the new materials would offer great opportunities for advanced technology.

You have been invited here as a select group of Materials Inspection and Selection Specialists, to discover and report on the changed materials properties in our labs. Your mission is, for each altered material, to do the following:

1. Determine how the materials properties differ between the two samples provided.
2. Decide which of the two samples is the "original" material, and which is the "altered" material.
3. Suggest potential application (use) for the new, "altered" material.
4. Prepare to present your results. Each team will present a short report on one material at the end of the session.

You will soon receive a tour of our Thermal Reaction and Hydration Chemistry labs, which are available for your use. This packet includes Data & Observation sheets for your notes and formatted transparencies for your final report.

Good luck!