# Ceramic Mold Making

This playbook outlines the process of creating plaster molds for ceramics, which is a technique used for replicating ceramic objects with precision and consistency.

### Step 1: Design Concept

Sketch the design of the ceramic object to understand the form and details. Determine the number of parts the mold will require, considering undercuts and negative space.

### Step 2: Model Creation

Create a prototype (model) of the ceramic object using clay or another appropriate material. The prototype should be the exact size and shape of the desired final product.

### Step 3: Seal & Release

Seal the prototype with a sealant to prevent the plaster from sticking. Apply a release agent to ensure the mold separates easily from the prototype.

### Step 4: Build Barriers

Construct barriers or walls around the prototype to define the mold boundaries. These barriers will contain the plaster until it sets.

### Step 5: Mix Plaster

Mix the plaster according to manufacturer instructions, ensuring it has the correct consistency—neither too fluid nor too thick.

### Step 6: Pour Plaster

Carefully pour the plaster over the prototype within the barriers. Tap the barriers to release any air bubbles, and ensure the plaster is level and covers all details of the prototype.

### Step 7: Cure Mold

Leave the plaster to set and cure completely, following the recommended time given by the plaster manufacturer, which is usually a few hours.

### Step 8: Remove Barriers

Once cured, carefully dismantle the barriers around the plaster mold.

### Step 9: Extract Prototype

Gently separate the prototype from the plaster mold, paying special attention to not damaging fine details of the mold.

### Step 10: Mold Finishing

Smooth any rough edges or surfaces on the mold. If needed, coat the mold with a sealant specific for ceramic mold making.

### Step 11: Mold Drying

Allow the mold to dry completely. Drying time may vary depending on mold size and environmental conditions.

### Step 12: Mold Storage

Store the mold in a dry, safe space to avoid any form of distortion or damage until ready for use in ceramic replication.

## General Notes

### Prototyping Material

If clay is used for the prototype, ensure it is completely dry before constructing the mold.

### Mold Release Agents

Common mold release agents include diluted liquid soap or specialized mold release products. Always test on a small area first.

### Mold Cleanliness

Ensure the mold is clean before using it for ceramic casting as any particles can affect the final product quality.