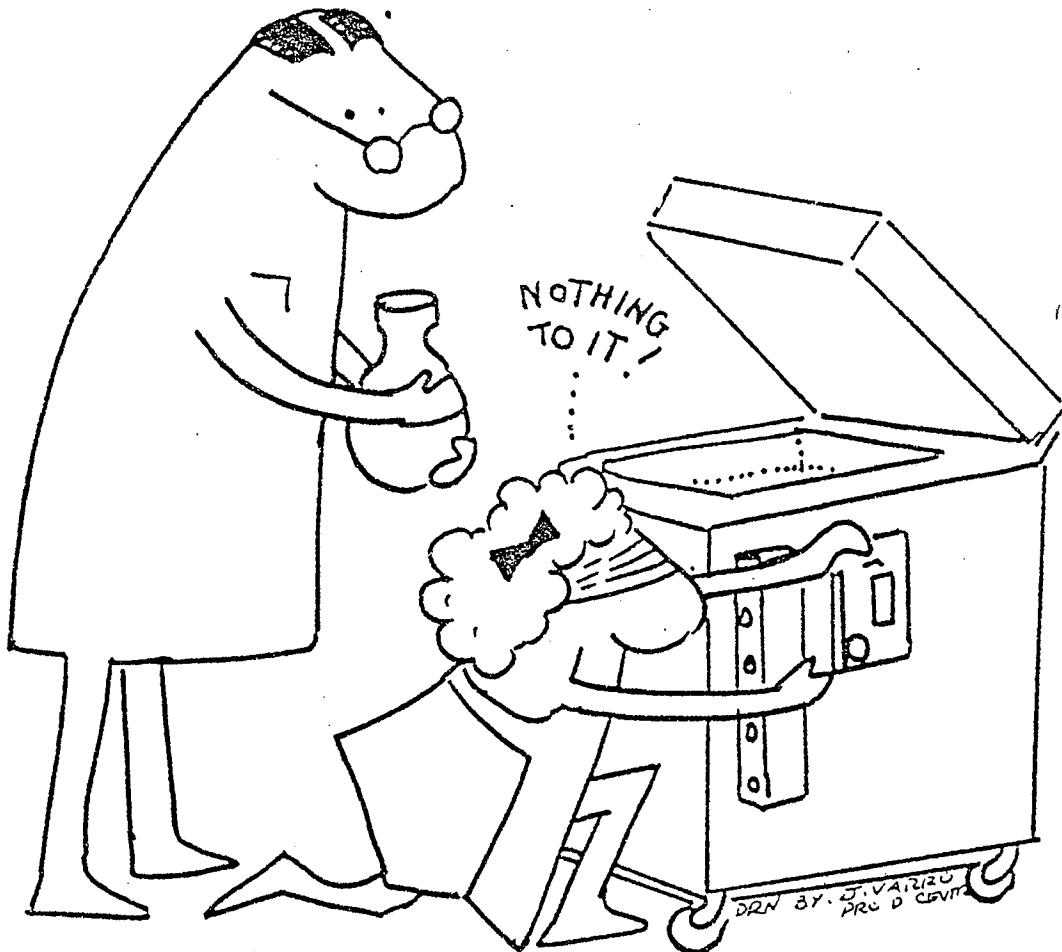


HOW TO DO IT

ESTRIN  
**KILN  
GUIDE**

FOR TEACHERS WHO HATE ...  
HOW-TO-DO-IT GUIDES



A SET OF INSTRUCTIONS THAT WILL MAKE KILN  
OPERATIONS EASY AND ENJOYABLE



Schow Education Centre

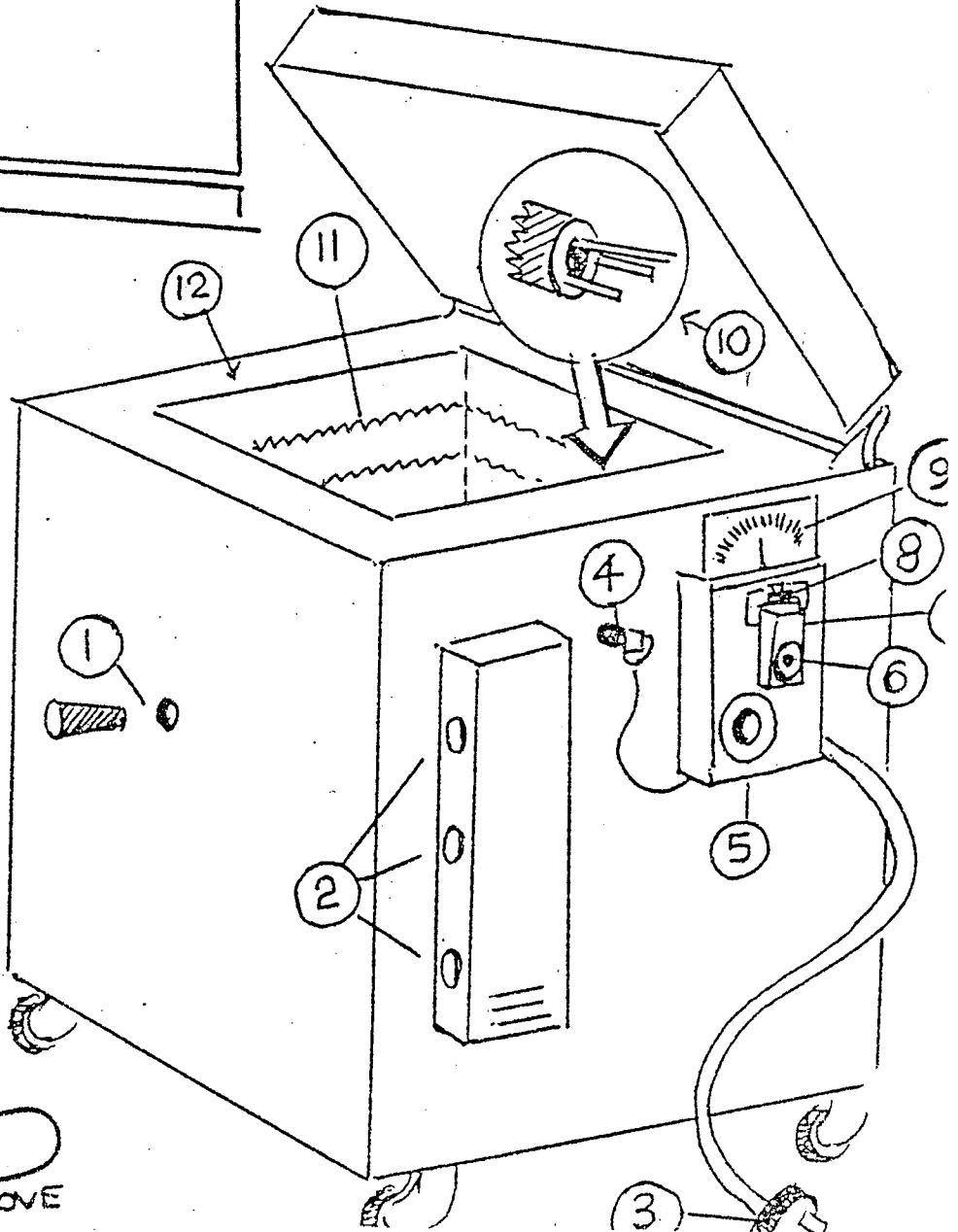
# 12 *Simple* KILN PARTS

Aa Bb Cc Dd

Jane is here

Joyce said

1. PEEP HOLE & PLUG
2. CIRCUIT SWITCHES
3. 220 VOLT PLUG-IN
4. THERMOCOUPLE
5. TIMER
6. TRIGGER BUTTON
7. WEIGHT
8. TRIGGER
9. PYROMETER
10. SENSING ROD AND CONE HOLDER
11. ELEMENT
12. INSULATING BRICK



KILN GLOVE

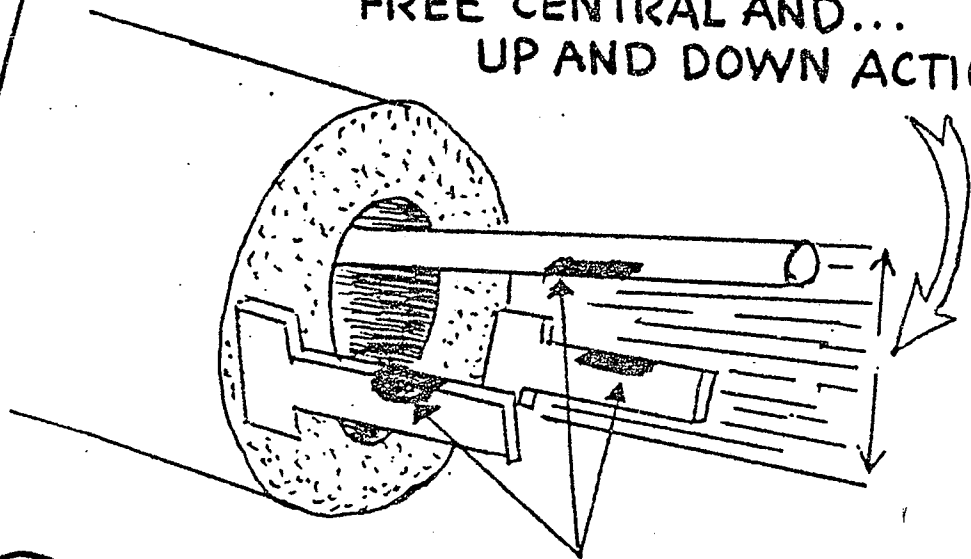
# NORMAL OPERATING

## STEPS



① MAKE SURE ALL CIRCUIT SWITCHES ARE OFF.

② CHECK SENSING ROD FOR FREE CENTRAL AND... UP AND DOWN ACTION

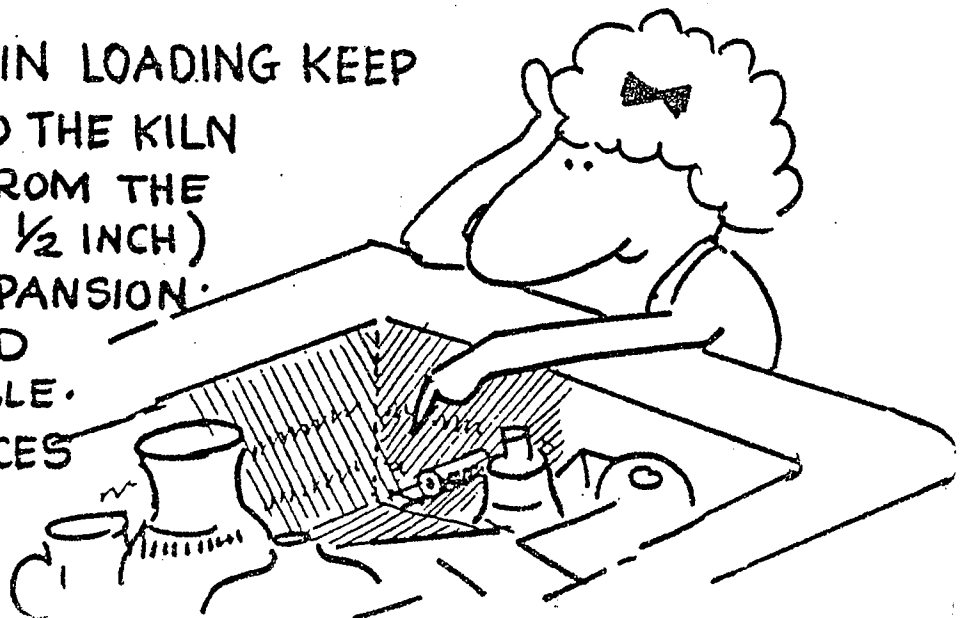


③ APPLY KILN WASH TO THE 2 CONE SUPPORTS AND TO THE BOTTOM OF THE SENSING ROD.

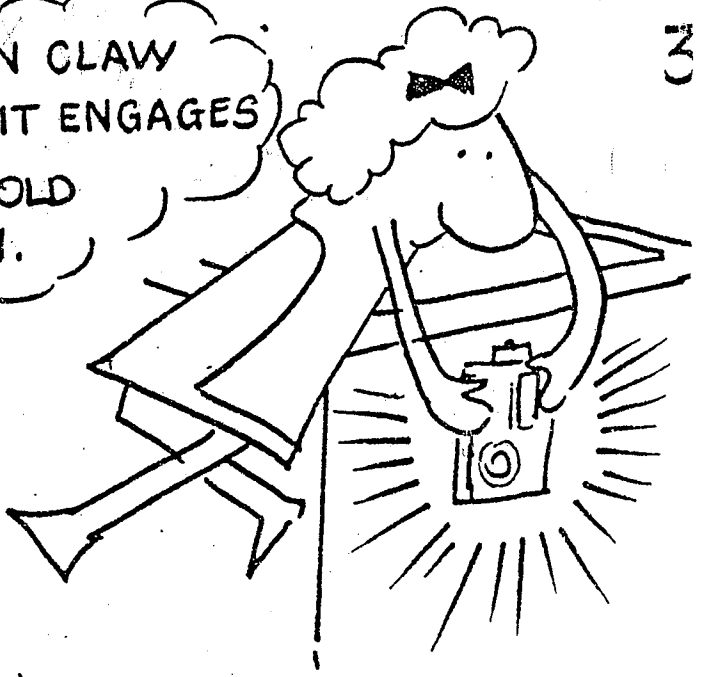


④ IN LOADING KEEP

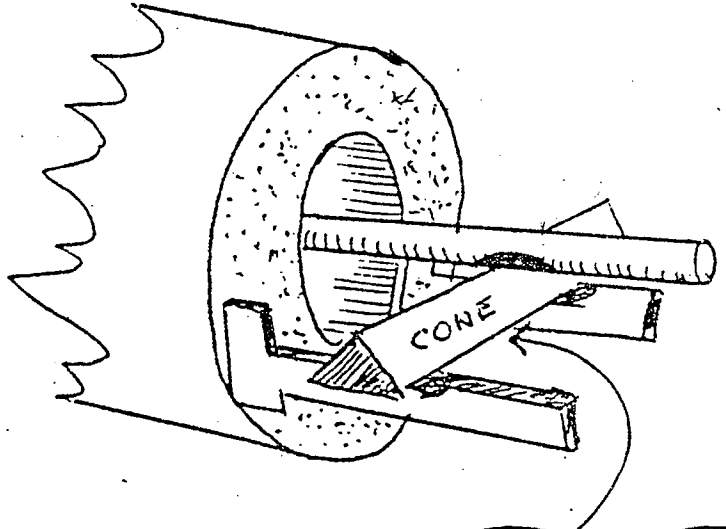
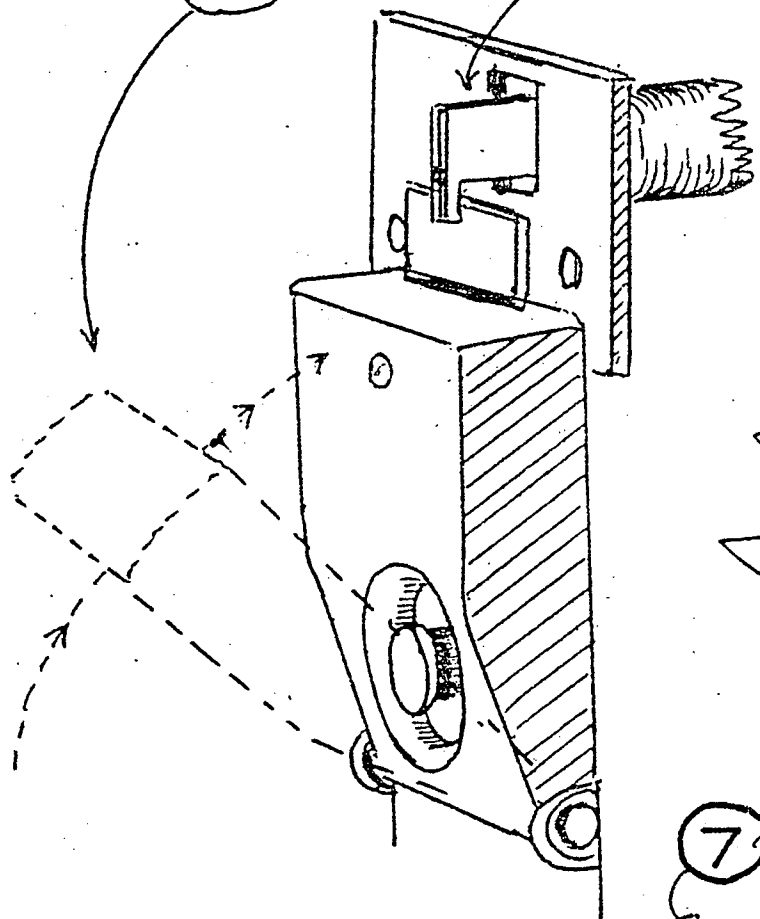
THE POTTERY AND THE KILN SHELVES AWAY FROM THE CONE SUPPORTS ( $\frac{1}{2}$  INCH) TO ALLOW FOR EXPANSION. THE CONE SHOULD ALWAYS BE VISIBLE. LOAD HEAVY PIECES ON BOTTOM OF THE KILN



6 PRESS DOWN CLAW LIGHTLY UNTIL IT ENGAGES TRIGGER AND HOLD IT DOWN.

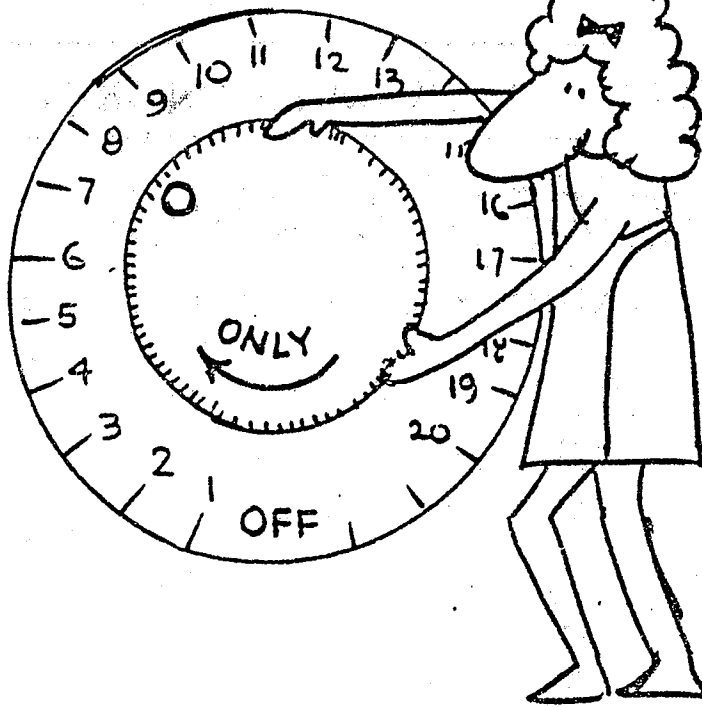


5 RAISE WEIGHT AND TRIGGER UP AGAINST THE PLATE.

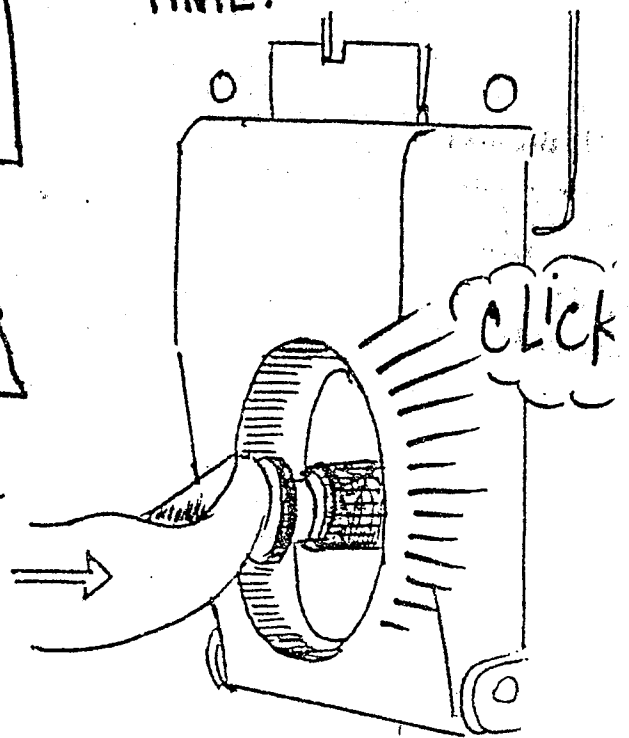


7 INSERT BELL CONE (PROPER NUMBER?): IS IT IN A PARALLEL AND CENTERED POSITION?.....  
RELEASE THE CLAW SLOWLY....  
\* ALWAYS DOUBLE CHECK THE CONE POSITION JUST BEFORE CLOSING LID!

8 CLOSE THE LID, BUT PROP OPEN ONE INCH...USE A PIECE OF OLD INSULATING BRICK.



⑨ SET LIMIT TIMER KNOB TO  $\frac{1}{2}$  TO 1 HOUR BEYOND THE ESTIMATED FIRING TIME.



⑩ INSERT THUMB INTO HOLE AND PUSH FIRMLY IN ON PLUNGER-TRIGGER-BUTTON UNTIL IT LOCKS.

⑪ CHECK... MAKE SURE NOTHING OBSTRUCTS THE FREE FALL OF THE WEIGHT.

⑫ FIRING PROCEDURE: TEST EACH CIRCUIT BY TURNING ON EACH CIRCUIT SWITCH SEPARATELY TO HIGH... A LOW HUM INDICATES CIRCUIT IS OPERATING .... IF NO HUM... RECORD THE CIRCUIT NUMBER.

**1<sup>ST</sup> HOUR** TURN ALL CIRCUITS ON LOW, WITH THE PEEP-HOLE PLUG OUT AND THE LID PROPPED OPEN 1 INCH WITH INSULATING BRICK.

**2<sup>ND</sup> HOUR** MAKE YOUR FINAL CHECK OF YOUR CONE REMOVE LID PROP, CLOSE AND LATCH; PUT PLUG IN PEEP-HOLE... TURN ALL CIRCUITS ON TO

3<sup>RD</sup> HOUR TURN ALL CIRCUITS ON HIGH

## ⑬ FIRING REFERENCE *Guide*

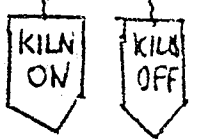
\* LOAD SIZE WILL VARY YOUR FIRING CYCLE

← Plainsman  
10 clay, use  
one 03 for  
isque then  
5 or 06  
r glaze

● FOR BISQUE FIRING USE CONE 012 = 1600°F  
1 HOUR LOW, 2ND HOUR MEDIUM - REST ON HIGH.  
TIMER SHOULD BE SET FROM 6 TO 8 HOURS.

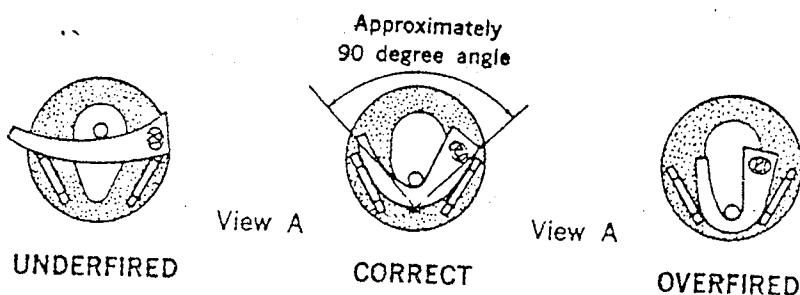
● FOR GLAZE FIRING USE CONE 05 = 1950°F  
SAME PROCEDURE - FIRING TIME 6-TO-10 HOURS

## TIPS ON KILN USAGE & MAINTENANCE

- ① KILN AREA SHOULD BE DESIGNATED OUT OF BOUNDS - USING HANGING SIGNS. 
- ② ONLY AUTHORIZED PERSONNEL SHOULD OPERATE THE KILN. A LOG BOOK SHOULD BE KEPT RECORDING TIMES, DATES, TYPE AND NUMBER OF FIRINGS, ETC.,
- ③ KILN AREA SHOULD BE WELL VENTILATED.
- ④ USE ONLY SCHOOL BOARD CLAYS AND GLAZES.
- ⑤ SLOW DRYING OF CLAY IS BEST (FACE TEST).
- ⑥ PRE-DRYING MAY BE DONE ON TOP OF KILN LID. DO NOT LEAVE POTTERY ON PLYWOOD BATS.
- ⑦ TO PROTECT FROM GLAZE DRIPPING ON THE SHELVES, USE KILN WASH ON THE UPPER-SIDE OF SHELVES AND ON BOTTOM OF KILN, APPLY WITH BRUSH; LIGHT SUCCESSIVE LAYERS. DO NOT PUT ON UNDERSIDE OF SHELVES.
- ⑧ INSPECT KILN AFTER EACH FIRING. FLICK OFF THE

- ⑨ NEVER FIRE A SHAKY KILN LOAD — *RE-STACK IT!*
- ⑩ NEVER ALLOW POTTERY TO TOUCH ELEMENTS
- ⑪ IF ELEMENTS CRAWL OUT-OF-GROOVE, TURN THAT CIRCUIT ON AND WHILE RED HOT GENTLY PUSH IT BACK INTO PLACE WITH A PIECE OF WOOD  
NEVER MOVE A COLD ELEMENT — THEY ARE BRITTLE AND MAY BREAK (UNREPAIRABLE)
- ⑫ DO NOT REMOVE HOT PEEP-HOLE PLUG.
- ⑬ ALLOW THE KILN TO COOL SLOWLY, YOU MAY CRACK THE LID OPEN AT AROUND 500° F
- ⑭ ALWAYS USE KILN GLOVES — DO NOT REMOVE POTTERY UNTIL WELL COOLED.
- ⑮ IN BISQUE FIRING, STACK POTTERY INSIDE ONE ANOTHER TO ECONOMIZE ON SPACE  
THEY MAY TOUCH
- ⑯ IN GLAZE FIRING— ALLOW 1/2 INCH SPACE BETWEEN PIECES — THEY MUST NOT TOUCH
- ⑰ IN UNLOADING KILN — WATCH FOR GLAZE RUNS — ON EDGES THEY CAN BE RAZOR SHARP — SANDPAPER THEM OFF.
- ⑱ VACUUM KILN EVERY SIX MONTHS (DO NOT USE POWERFUL SCHOOL VACUUM.)
- ⑲ NEVER PUT COMBUSTIBLES IN THE KILN.

CHECK THE ACCURACY OF FIRINGS BY REFERRING TO THESE SKETCHES



# VOCABULARY ●

KILN

KILN SITTER

PEEP-HOLE & PLUG

220 VOLT PLUG

TIMER

TRIGGER BUTTON

WEIGHT

PYROMETER

SENSING ROD

CONE HOLDER

ELEMENTS

CIRCUIT

KANTHOL WIRE

INSULATING BRICK

KILN GLOVES

CONES

CIRCUIT SWITCHES

POTTERY

CLAY BODY

KILN WASH

GLAZES

BISQUE WARE

GREENWARE

THERMOCOUPLE

TEST CONES

