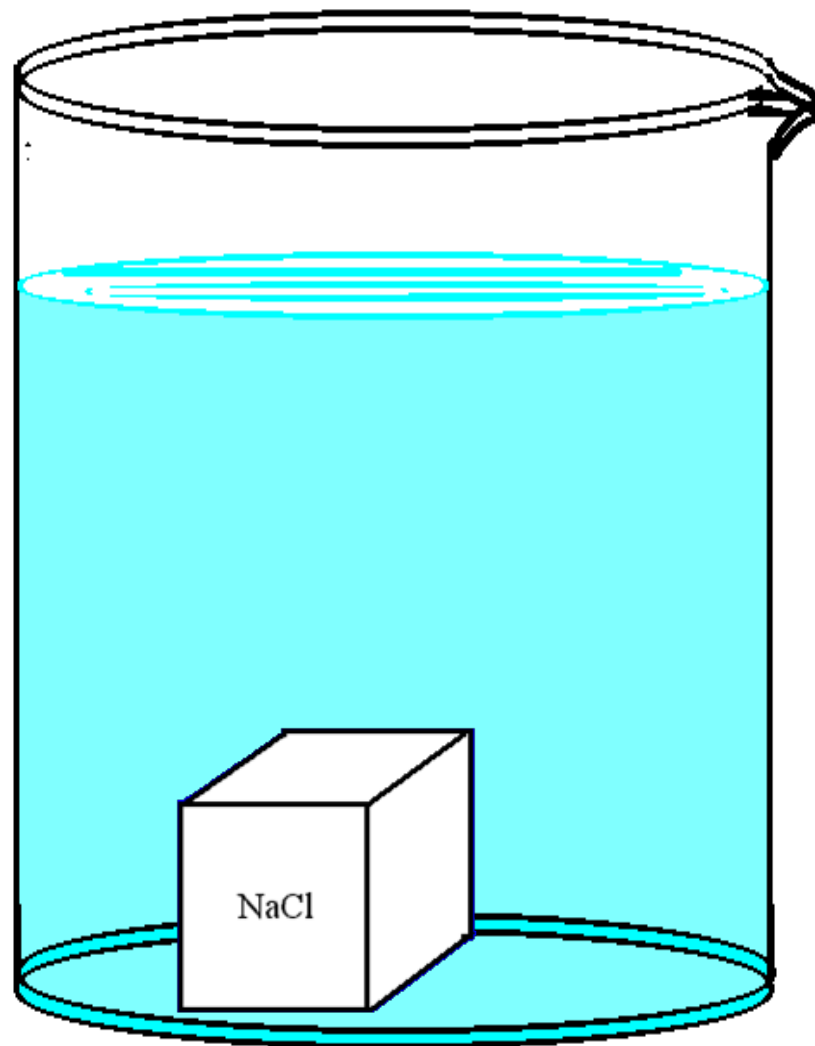
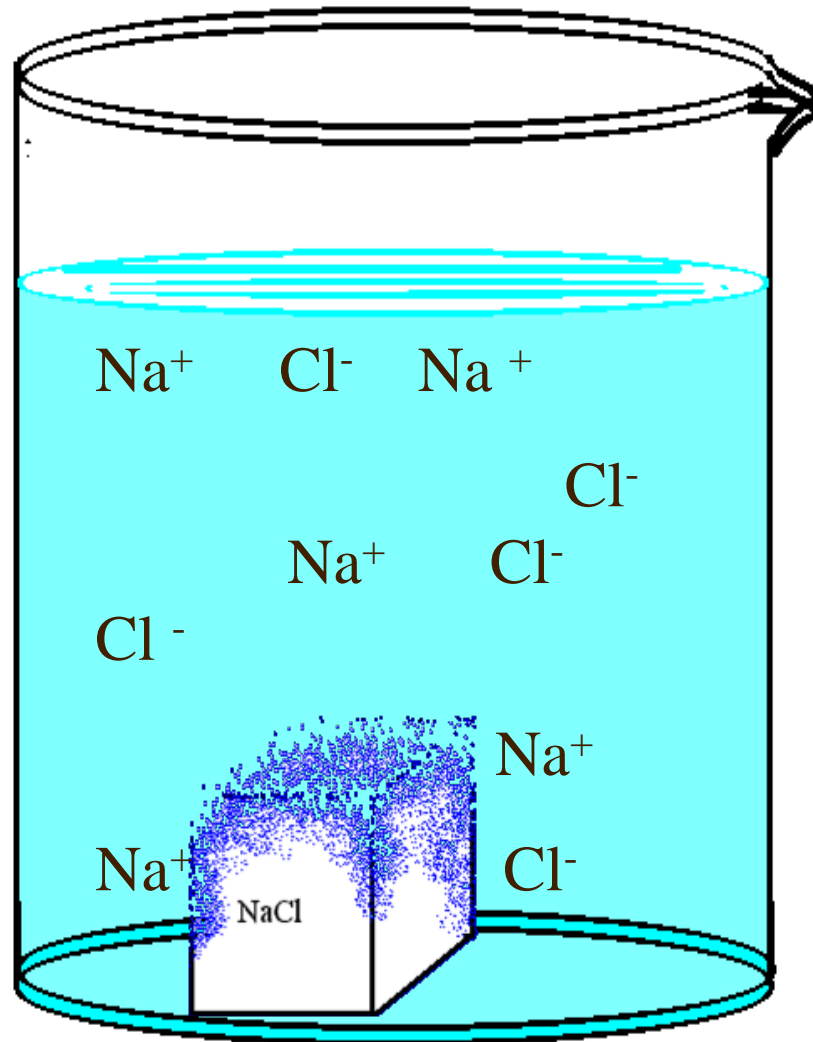


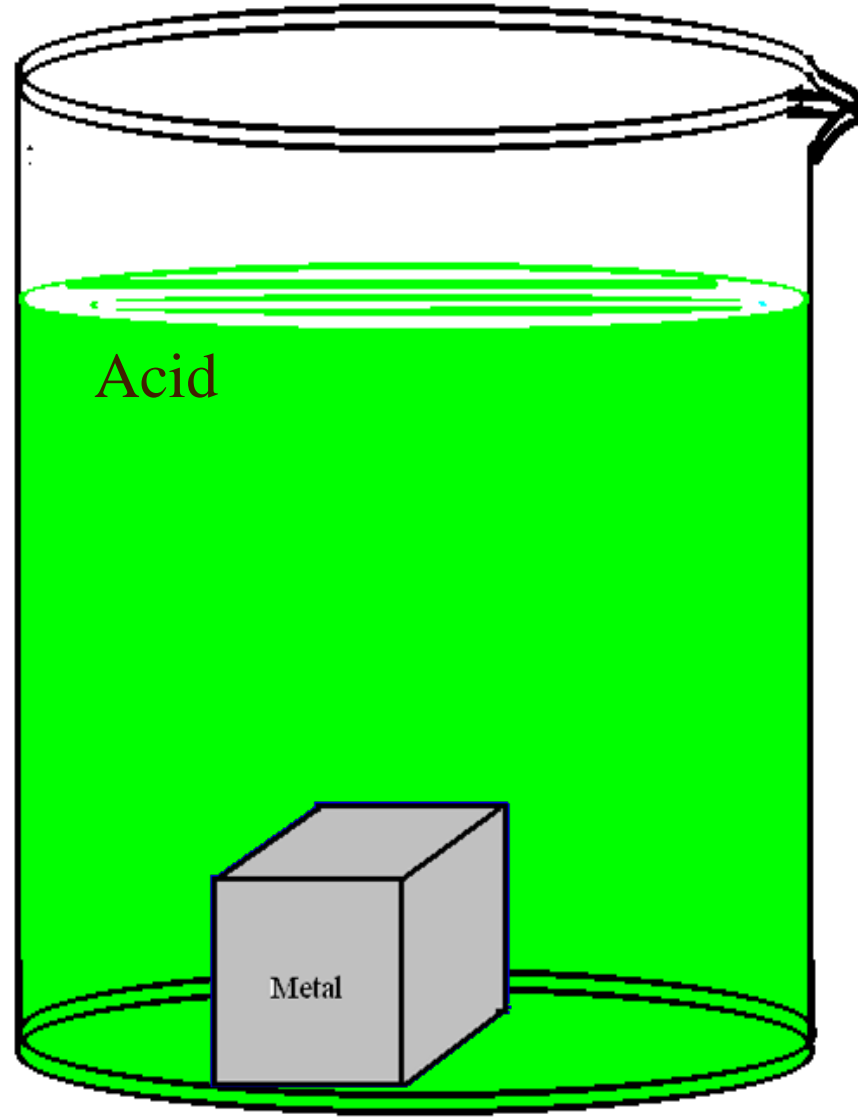


Metal Finishing

Removable Partial Denture
frameworks

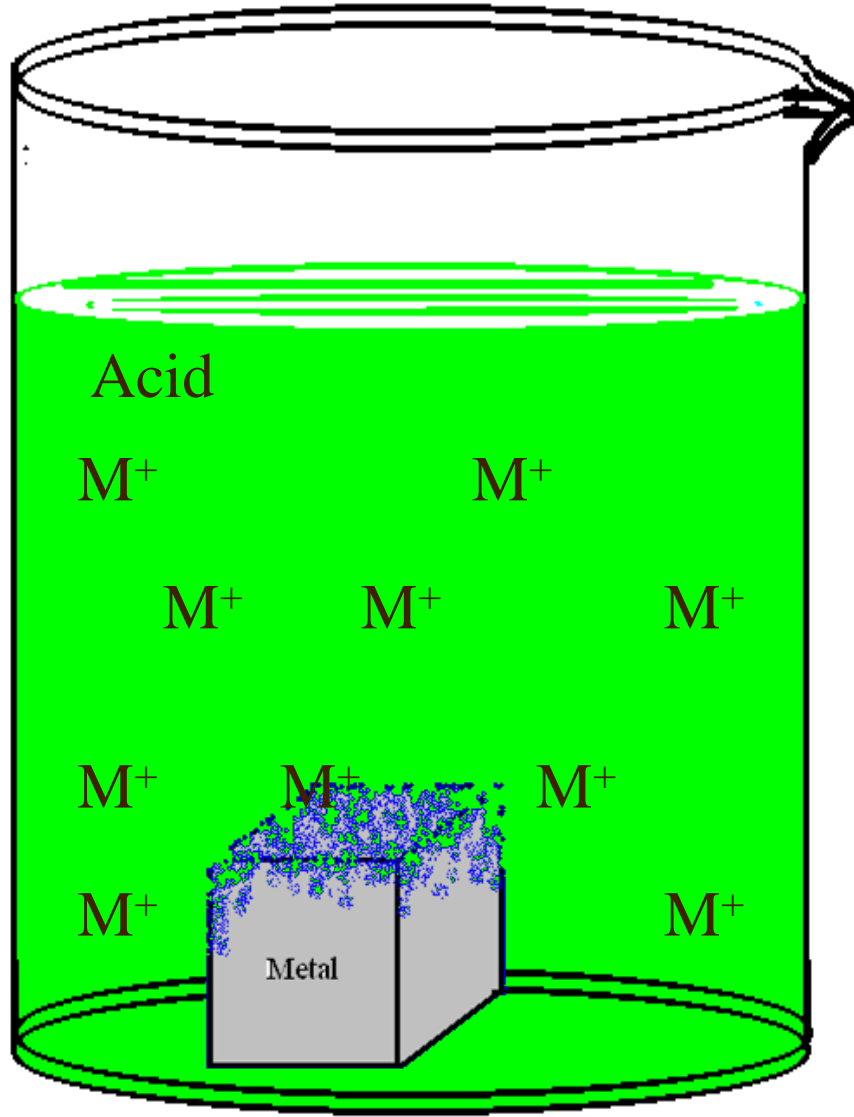


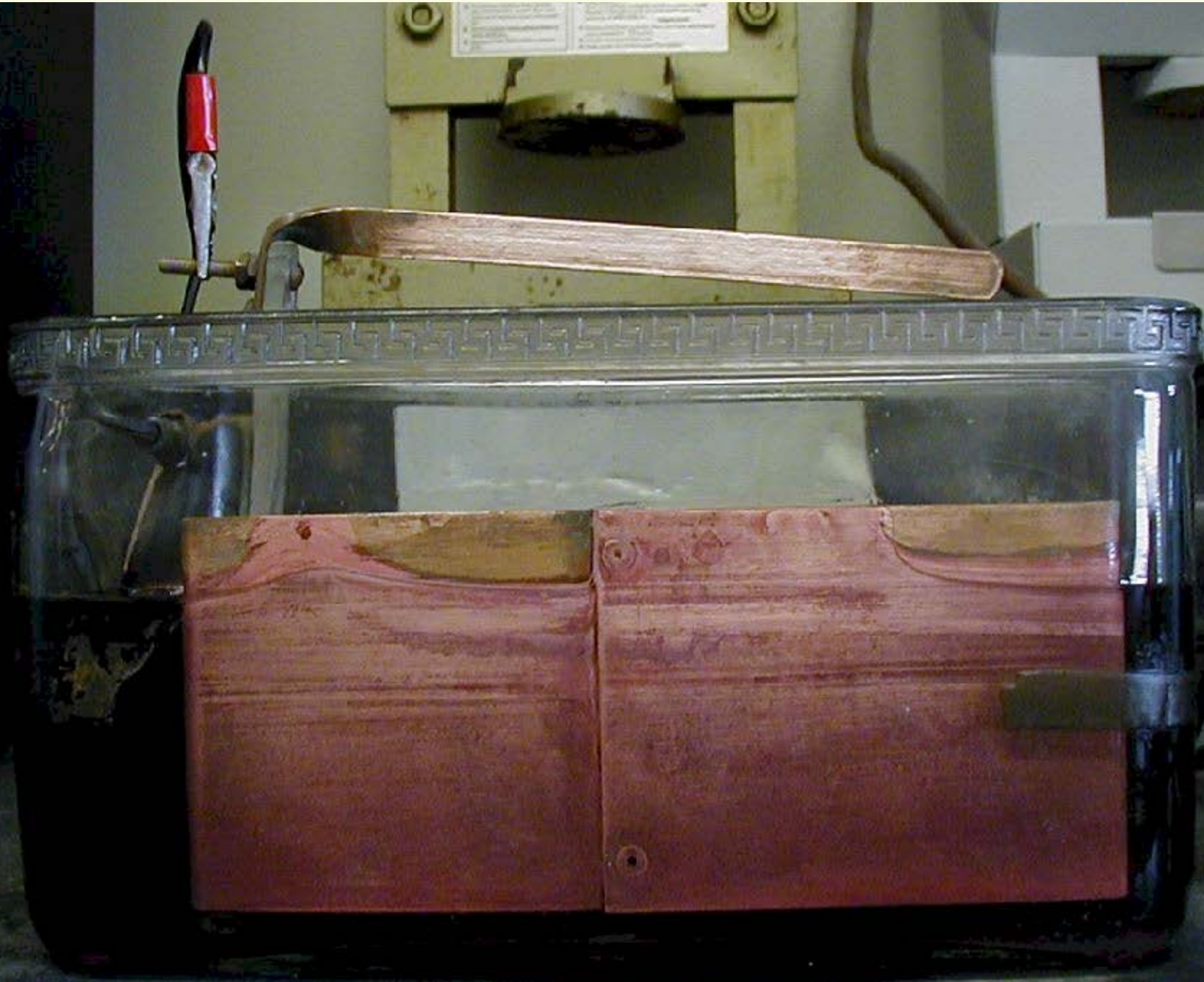




Acid

Metal

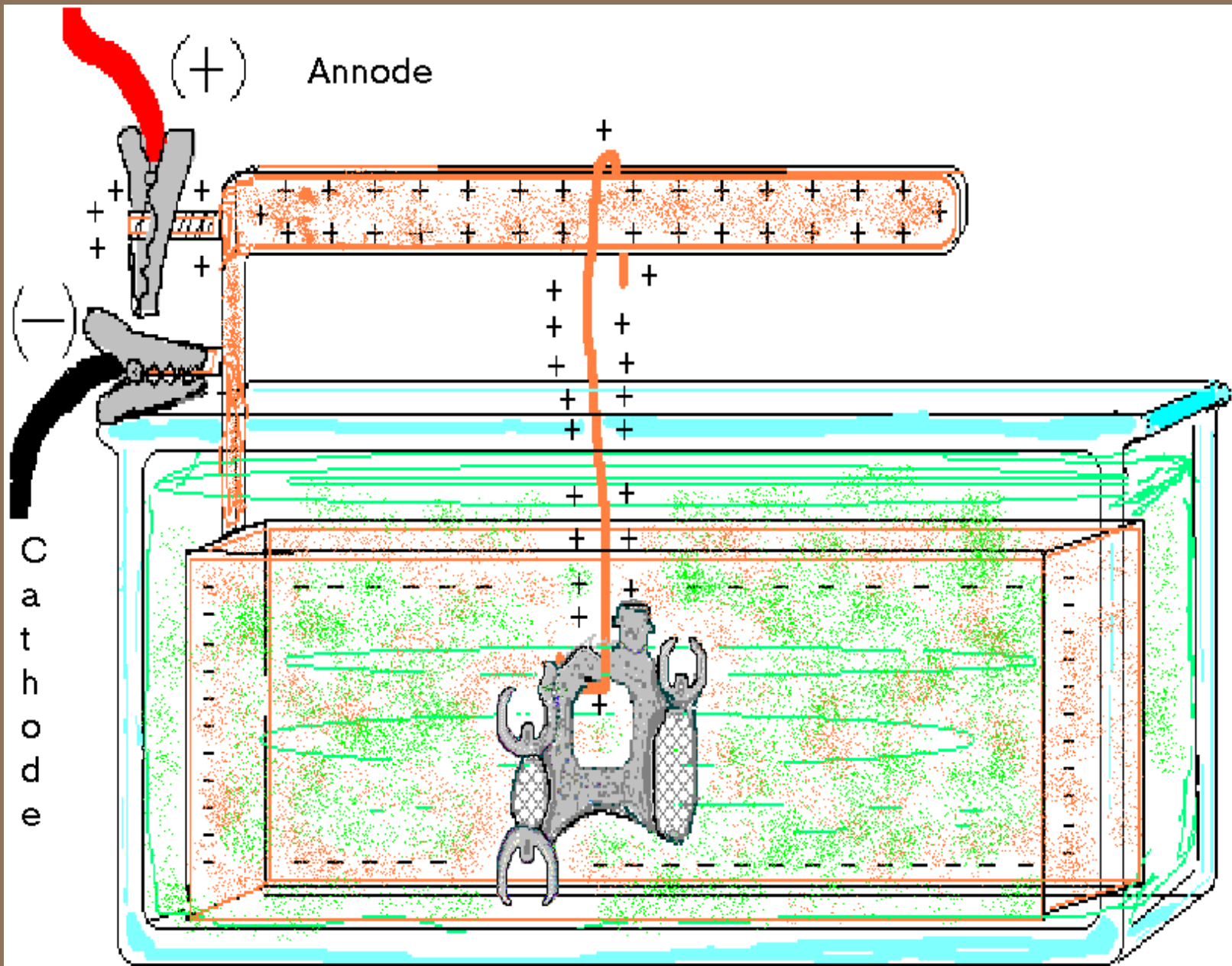








ELECTRO-POLISHER



(a) Electro polisher

1 Removes a layer of metal from the frameworks by an electrolytic deplating process

2 Uses an acid with electric current

3 Temperature of the acid during use should be between **120°F- 140°F**

48°C- 60°C

(a) Electro polisher

4 Parts of the Electro polisher

- a Cathode clip
 - - attached to a wire that originates from the **negative (black)** terminal

- b Cathode assembly
 - 1 Attached to cathode clip
 - 2 Immersed in bowl of acid

(a) Electro polisher

4 Parts of the Electro polisher

– c Anode clip

- 1 Attached to framework
- 2 Mounted on a platform
- 3 The wire originates from the **(red) positive** terminal

(a) Electro polisher

4 Parts of the Electro polisher

- d Control box
 - 1 Amperage switch
 - 2 Timer - **6 minutes**

(a) Electro polisher

SAFETY

- 1 Keep solution covered when not in use
- 2 Use in well ventilated area
- 3 If solution contacts hands or clothing, wash off immediately

(4) Procedures

(g) Electro polishing

- 1 Prepare frameworks for Electro polishing
 - a Castings must be thoroughly sandblasted before Electro polishing
 - 1 After sandblasting, **DO NOT** touch castings with your hands
 - 2 Oils from the skin will contaminate the castings
 - b Rinse castings in water
 - c Dry castings thoroughly

(4) Procedures

(g) Electro polishing

- 2 Put on proper personal protective equipment:
- 3 Procedure for Electro polishing
 - a Electro solution is heated to the working temperature of **120°F to 140°F**
 - b Attach the casting to the **anode assembly**
 - c Attach the cathode clip to the **cathode assembly**

(4) Procedures

(g) Electro polishing

- 2 Put on proper personal protective equipment:
- 3 Procedure for Electro polishing
 - d Insert attached casting into Electro polishing solution bowl (tip of anode clip should be immersed)

(4) Procedures

(g) Electro polishing

- e Turn on unit
 - 1 Regulate the amperage switch to the proper amperage
 - » a Estimate 2 amps per square inch on both sides
 - » b For the average casting, set amperage for 6 amps, set the timer for 6 minutes

(4) Procedures

(g) Electro polishing

- f Remove casting from Electro-polishing solution
 - 1 Remove anode assembly with casting attached from Electro-polishing solution
 - 2 Dip casting and anode clip into bowl of sodium bicarbonate solution to neutralize Electro-polishing solution
 - 3 Allow casting to remain in solution one minute, to neutralize acid
 - 4 Dry off anode clip