CUT AND HEAL

1. MATERIALS NEEDED:

large kitchen knife (edge must be dull)
0.3 M iron(III) chloride solution, $FeCl_3$
0.3 M potassium thiocyanate solution, KSCN
0.3 M sodium thiosulfate solution, $Na_2S_2O_3$
cotton balls or absorbent cotton

2. SAFETY PRECAUTIONS:

Wear safety goggles or glasses

The edge of the knife must be dull so you cannot cut your skin.

Iron(III) chloride solution can cause illness if ingested and can irritate the skin. In the event of skin contact wash the affected area with water.

Label each bottle of chemical with the actual contents of the bottle. For the demonstration only, you can add a temporary label of "iodine" to the $FeCl_3$ container, "alcohol" to the KSCN container, and "antiseptic" to the $Na_2S_2O_3$ container.

Wash the areas of skin treated with chemicals from this experiment with water.

3. DISPOSAL:

Cotton balls that are wet with chemicals from this experiment, can be disposed of in the trash.

4. PROCEDURE:

Show your audience the large knife.

"Sterilize" your arm with "iodine" (the $FeCl_3$ solution) on a cotton ball.

"Sterilize" the knife blade with "alcohol" (the KSCN solution) on a cotton ball.

Slowly and carefully, "cut" your arm. The area will turn dark red.

Heal your arm by applying the "antiseptic" (the $Na_2S_2O_3$ solution) on a cotton ball.