

Food Coloring and Blood Typing

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Materials:

8 clear plastic cups
water
food coloring - yellow and blue
plastic pipet
beaker for waste water

Procedure:

Label cups A, B, AB and O. Make two of each: one set donors, one set is recipients.

Fill each "donor" cup with water and color the water as follows:

A= 2-3 drops yellow food coloring

B= 2-3 drop blue food coloring

AB= 2-3 drop yellow AND 2-3 drops blue food coloring

O= no food coloring.

1. Place a small amount of "blood" in each recipient cup (A in A, etc.)
2. "transfuse" each "blood type" with 5 ml of "type A." If there is a color change, the transfusion was not successful.
3. Record results and discard "recipient" blood. Refill "recipients" from donor stock, then "transfuse" each with "type B".
4. Continue until you have "transfused" each blood type.
5. Determine "universal donor" and "universal recipient."

Students can generally remember the color changes better than the more abstract antibody-antigen reactions.