

## **Kit prep sheet**

### **Simulated blood For unknown sample at crime Scene (unknown is A)**

Use red food coloring and water to create the base, and then add the following substances to create the desired results.

- 1. Type A: add whole milk**
- 2. All other types: add cornstarch**

### **Antisera**

- 1. Anti –A = vinegar**
- 2. Anti – B= water**

**Milk curdling on contact with anti A = +ve A**

**Milk not reacting with water = -ve B**

**Change the contents as needed to create the unknown sample at the crime scene. Select a blood type for the victim and let the suspects be O. Allow 2 suspects to be positive to encourage differential analysis.**

**DNA STRANDS- color code if students need modification**

**Victim – ATCGCCGGTTTAATCCGGTAATTA**

**Unknown sample**

**At crime scene – AATCGCCGGTTGTAATCCGGTAAT**

**Suspect 1– ATCCCGGTTTAATCCGGTAATAAA**

**Suspect 2- ATCGCCGGTTTAATAATTCGGTTA**

**Suspect 3 – AATCGCCGGTTGTAATCCGGTAAT**

**Scissors labeled restriction enzyme**

**In each kit place testing materials to hand out to groups**

**NYS Standards: Living Environment Core Curriculum**

**2.1a, 2.1b, 2.1c, 2.1f**