Need for Speed – A Look at Enzyme Activity

| Time (seconds) | Trial 1 | Trial 2 | Trial 3 |
|----------------|---------------|--------------|-------------|
| | Normal Enzyme | Denaturation | Competitive |
| | Activity | | Inhibition |
| 0-10 | | | |
| 11-20 | | | |
| 21-30 | | | |
| 31-40 | | | |
| 41-50 | | | |
| 51-60 | | | |
| Total | | | |

Directions:

- 1. Trial 1 will be done as a whole class. Nominate one person in your group to be the "enzyme" while the other two will count and record data.
- 2. In order to count a penny as having been acted upon by the enzyme, the "enzyme" must pick one penny up at a time, take it back to your lab table, and lay it HEADS UP.
- 3. You will need 50 pennies for Trials 2 and 3.
- 4. For Trial 2, lay the 50 pennies evenly on half of the lab table. It does not matter which face is up. Tape the "enzyme's" thumb and index finger together. While one person keeps track of time, attempt to pick up and place as many pennies as possible heads up on the opposite half of the table.
- 5. For Trial 3, tape a single marble to your index and middle fingers together. Continue the same way as Trial 2.
- 6. RETURN the pennies, marbles, and tape!

