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Worksheet 2: Antibiotic testing results

Microbiology: Discovering antibacterial agents

1. Fill out table 1 for the antibiotics you will be using.

Antibiotic	**Spectrum (G+ or G−)**	**Mechanism of action**

Table 1

2. Fill out table 2 with your results.

Antibiotic	**Concentration**	**Effect on G+ (inhibition zone in cm)**	**Effect on G− (inhibition zone in cm)**

Table 2

3. Compare your results with the other groups. Are the inhibition zones similar?

_____

_____

_____

4. What difference did the concentration make?

_____

_____

_____

_____

5. How does your starting concentration of one tablet in 200 ml compare with a medical dose of one pill dissolved in the water in a human body (students can look up how much water is typically found in the body)?
   Concentration in starting solution (mg/ml):_____
   Approximate concentration in an average body after taking the pill, assuming all the drug is absorbed (mg/ml): _____