*NYSED*
*Intermediate Level Science*
*Core Curriculum Guide*
*Grade 5-8*

# LAB SKILLS NEEDED FOR THE NYS GRADE 8 SCIENCE TEST

| GENERAL | LIFE SCIENCE | PHYSICAL SCIENCE |
|---|---|---|
| 1. Lab Safety<br>2. Metric ruler<br>3. Balance<br>4. Stopwatch<br>5. Graduated cylinder<br>6. Thermometer<br>7. Spring scale<br>8. Voltmeter<br>9. Labeling answers with correct units of measure<br>10. Recognize/analyze patterns and trends<br>11. Classify objects according to a scheme<br>12. Develop & use a dichotomous key<br>13. Sequence events<br>14. Identify cause & effect relationships<br>15. Use indicators and interpret results | 16. Use a compound microscope<br>17. Measure with a compound microscope<br>18. Prepare a wet mount slide<br>19. Use appropriate staining techniques to view specimens with a microscope<br>20. Construct and use a Punnett Square or a Pedigree Chart to predict probability of traits<br>21. Classify living things according to a scheme<br>22. Interpret and/or be able to illustrate energy flow in a food chain, energy pyramid, or food web<br>23. Identify pulse points and pulse rates<br>24. Identify structure and function relationships in organisms | 25. Latitude and longitude<br>26. Identify minerals using identification tests and flow charts<br>27. Use diagrams of the rock cycle to determine geologic processes/events that led to the formation of specific rock types<br>28. Plot location of recent earthquake and volcanic activity on a map and identify patterns of distribution<br>29. Use a magnetic compass to find cardinal directions<br>30. Measure angular elevation of an object, using appropriate instruments<br>31. Generate/interpret field maps (topographic, weather)<br>32. Predict characteristics of an air mass based on origin<br>33. Measure weather variables (wind speed, direction, relative humidity, barometric pressure, etc.)<br>34. Determine density of liquids, regular and irregular-shaped solids<br>35. Determine volume of regular & irregular-shaped solids using water displacement<br>36. Use periodic table to distinguish between metals, nonmetals, or noble gases<br>37. Determine identity of an unknown element using physical and chemical properties<br>38. Using appropriate tools, separate the parts of a mixture<br>39. Determine electrical conductivity of a material, using a simple circuit<br>40. Determine the speed and acceleration of a moving object |