

# HIGH SCHOOL SCIENCE CHECKLIST

## Goal 13

### Illinois Learning Standards A & B

#### Assessment Frameworks

PSAE test questions are derived from this list.

#### SAFETY AND PRACTICES OF SCIENCE

- \_\_\_\_\_ Understand basic rules of safety in conducting scientific experiments in a laboratory or in the field. **IT, AG**
- \_\_\_\_\_ Understand why experimental replication is essential to scientific claims. **AG**
- \_\_\_\_\_ Understand how scientific knowledge, explanations, and technological designs may change with new information. **AG**
- \_\_\_\_\_ Understand that scientists must be responsible about how they conduct their experiments. **AG**
- \_\_\_\_\_ Determine the degree of accuracy in measurements. Identify possible sources of error in measurement. **AG**

#### SCIENCE, TECHNOLOGY, AND SOCIETY

- \_\_\_\_\_ Identify important contributions to science and technology that have been made by individuals such as: Benjamin Banneker, Alexander Graham Bell, Elizabeth Blackwell, Niels Bohr, Rachel Carson, George Washington Carver, Copernicus, Marie Curie, Charles Darwin, Charles Drew, Thomas Edison, Albert Einstein, Michael Faraday, Benjamin Franklin, Galileo, Jane Goodall, Dorothy Hodgkin, Edwin Hubble, Mae Jemison, Edward Jenner, Ernest Just, Johannes Kepler, Robert Koch, Antoine Lavoisier, Percy Lavon Julian, Lewis Howard Latimer, Anton van Leeuwenhoek, Carl Linnaeus, James Maxwell, Elijah McCoy, Lise Meitner, Dmitri Mendeleev, John Muir, Isaac Newton, Florence Nightingale, Louis Pasteur, Max Planck, Charles Steinmetz, Alfred Wegener, Daniel Hale Williams, and Wilbur and Orville Wright. **HO**
- \_\_\_\_\_ Understand how technology influences society and can change how we live. **HO, BU, AG**
- \_\_\_\_\_ Analyze careers and occupations related to science. **BU, AG**

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**MEASUREMENT**

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\_\_\_\_\_ Indicate the use of measurement instruments. Select appropriate scientific instruments and technological devices to perform tests, measure, and collect data.

***IT***