

Achievement Level Descriptors – Biology

Achievement Level I

Students performing at this level do not have sufficient mastery of knowledge and skills of the course to be successful at a more advanced level in the content area.

Students performing at Achievement Level I recognize basic biological concepts and require extensive remediation to successfully complete the course. They can inconsistently identify the steps involved in the scientific process. Students at this level may recognize biological terms but demonstrate minimal understanding of the application of the terms.

Achievement Level II

Students performing at this level demonstrate inconsistent mastery of knowledge and skills of the course and are minimally prepared to be successful at a more advanced level in the content area.

Students performing at Achievement Level II demonstrate limited understanding of biology concepts. These students can organize and interpret data with direct guidance. Students can identify basic cell structure/function, understand basic DNA structure, and solve simple Punnett squares. They can identify basic patterns of animal behavior and relationships among organisms in ecological systems.

Achievement Level III

Students performing at this level consistently demonstrate mastery of the course subject matter and skills and are well prepared for a more advanced level in the content area.

Students performing at Achievement Level III demonstrate mastery of biology concepts. These students understand and can conduct scientific inquiry, interpret and analyze data, and make predictions pertaining to various biological processes. They can understand form and function of biological systems. Students at this level interpret factors contributing to patterns of inheritance, animal behavior, and human health. They can assess how biotic and abiotic factors influence homeostasis within changing systems.

Achievement Level IV

Students performing at this level consistently perform in a superior manner clearly beyond that required to be proficient in the course subject matter and skills and are very well prepared for a more advanced level in the content area.

Students performing at Achievement Level IV demonstrate an advanced application of the scientific skills. These students demonstrate mastery of scientific inquiry skills including experimental design, identification of alternate interpretations of data, and application to real-world experiences. They can analyze the relationship between form and function of biological systems. They can also analyze and evaluate factors contributing to complex patterns of inheritance, animal behavior, and human health. Students at this level use their understanding of the universal genetic code to make predictions about unity and diversity of life.