



DC-CAS: PERFORMANCE LEVEL DESCRIPTORS

Reading Grade 8

The DC-CAS is a standards-based assessment. Based on performance, each student is classified as performing at one of four performance levels: advanced, proficient, basic, or below basic. The descriptions below provide a brief summary of typical performance for each level. The skills identified in each descriptor represent, but are not all-inclusive of, the skills a student is able to demonstrate at each performance level.

Below Basic

Students are able to use vocabulary skills, such as using words, simple sentence clues, and synonyms to determine meanings of words. Students are able to read some eighth grade informational and literary texts and can identify opinions, some facts and evidence to support an argument, and cause/effect relationships; draw simple conclusions based on stated information; relate literary works to their historical eras; explain how a text represents its genre; describe a character and an author's style; and make simple predictions about characters.

Basic

Students are able to use vocabulary skills, such as using words, complex sentence clues, and paragraph clues to determine meanings of new and multiple-meaning words. Students are able to read some eighth grade informational and literary texts and can restate facts and evidence, distinguish facts from opinions, respond to a set of instructions, make connections among texts, identify narrators and speakers, determine purposes for text, make comparisons of text to historical eras, describe characters and some elements of author's style, identify the effect of author's word choice, identify the conflict of a story, and use characters' words and actions to draw conclusions.

Proficient

Students are able to use vocabulary skills, such as using words, sentences, and paragraph context clues, as well as affixes, to determine meanings of words. Students are able to read eighth grade, complex informational and literary texts and can describe and elaborate on facts and evidence of an argument, evaluate information in a document, locate and determine purposes for inclusion of details, explain differences between two texts on the same topic, connect literature to art and history of its historical setting, analyze a character and how words create tone and mood, make predictions about characters, interpret descriptive phrases, and draw and support conclusions about characters.

Advanced

Students are able to use vocabulary skills, such as determining meaning of words by using affixes, root words, context clues, a variety of synonyms and antonyms, etymology clues; and recognizing idioms. Students are able to read eighth grade, complex informational and literary texts and can support an argument with facts and evidence, evaluate the adequacy of details to achieve a purpose, make inferences, use text features (e.g., footnotes and sidebars) to support understanding of text, compare literary works to art and history of their settings as well as to other literary works, interpret character traits and motivations, and draw conclusions about style, mood, tone, and meaning based on figurative language and author's word choice.



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Mathematics Grade 8

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Below Basic

Students may be able to perform computations with decimals, perform appropriate numeric operations, not always in correct sequence, and partially solve real world problems; may be able to identify simple patterns; may be able to identify different types of angles, and use scale drawings to represent data and use tools to determine measurements.

Basic

Students perform computations with decimals, perform appropriate numeric operations in correct sequence, and use strategies to solve real world problems; identify and extend simple patterns, evaluate simple expressions; identify and measure different types of angles, use scale drawings to represent data and solve measurement problems in one or two dimensions for which the solution is easily recognized and straight forward.

Proficient

Students perform computations with decimals and rationals, perform operations on numbers in correct sequence, create and use simple expressions to solve real world problems; identify and extend patterns, and solve simple one-step equations; use properties of lines, triangles, and rectangles to identify and determine angles in figures not drawn to scale; and use scale drawings and histograms to represent data and solve simple measurement problems.

Advanced

Students perform computations with decimals and rationals, perform operations on numbers and parenthetical expressions in correct sequence, create and use simple expressions to model real world problems; identify and extend patterns, and solve one-step equations; use properties of lines, triangles, rectangles, and other polygons to identify and determine angles in figures not drawn to scale; and use scale drawings and histograms to represent data and solve measurement problems.

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Science Grade 8

The DC-CAS is a standards-based assessment. Based on performance, each student is classified as performing at one of four performance levels: advanced, proficient, basic, or below basic. The descriptions below provide a brief summary of typical performance for each level. The skills identified in each descriptor represent, but are not all-inclusive of, the skills a student is able to demonstrate at each performance level.

Below Basic

Students are able to use scientific thinking to identify tables/charts/graphs that support claims about a given investigation and read analog/digital meters on instruments used to make direct measurements of length/volume/weight/elapsed time/rates/temperatures. Students are able to identify that matter is made of particles too small to be seen, recognize that solutions can be acidic/basic/neutral, describe kinetic energy as energy of motion and potential energy as energy of position, recognize that objects with like charges repel and objects with unlike charges attract, and recognize that changes in an object's speed/direction is a result of unbalanced forces.

Basic

Students are able to use scientific thinking to read analog/digital meters on instruments used to make direct measurements of length/volume/weight/elapsed time/rates/temperatures; identify appropriate units for some of those measurements, and recognize that arguments may be invalid if based on very small samples of data, biased samples, or experiments with no control sample. Students are able to use knowledge of physical science to recognize that when materials react, the amount of matter after the change is always the same as the amount of matter before; describe that reactions occur at different rates and identify common ways to change the rate of reaction; recognize that density is mass per unit volume; describe how kinetic energy can be transformed into potential energy as well as the reverse; recognize that heat energy is a common product of an energy transformation; recognize that force has both magnitude and direction; and explain that unbalanced forces acting on objects change the object's speed/direction or both.

Proficient

Students are able to use scientific thinking to describe how if more than one variable changes at the same time in an experiment, the outcome may not be attributable to a change in any single variable. Students are able to use knowledge of physical science to construct models of atoms; diagram and describe how atoms may combine into molecules; explain how elements and compounds react with each other to form products with different properties; and describe that the number of atoms in a chemical reaction stays the same no matter how they are arranged and the mass of atoms does not change significantly in chemical reactions, so the total mass stays the same during a reaction; explain how kinetic energy can be transformed into potential energy as well as the reverse; and describe that energy is a property of many systems and can take the forms of mechanical motion, gravitational energy, the energy of electric and magnetic fields, sound, heat, and light; and describe that in processes at the scale of atomic size or greater, energy cannot be created or destroyed, only changed from one form to another and explain that when forces on an object are balanced, the motion of the object does not change.

Advanced

Students are able to use scientific thinking to write step-by-step instructions for conducting new investigations; use tables/charts/graphs as evidence for claims made in original investigations; describe the work of pioneers of physics and cosmology; and identify arguments in which fact/opinion are intermingled, the conclusions do not follow logically from the evidence, an analogy is not apt, no mention is made of whether the control group is like the experimental group, or all members of a group are implied to have nearly identical characteristics that differ from those of other groups. Students are able to use knowledge of physical science to diagram and describe how atoms may combine into molecules using appropriate keys/labels, describe how the atoms/molecules/ions of an object are in constant motion, explain how their average motional energy determines the temperature of an object and how the strength of the forces between them determines the state of matter at that temperature, recognize that the logarithmic pH scale is used to describe how acidic/basic a solution is and that each change of one in the pH scale is a change of 10 times in concentration, explain that the buoyant force on an object in a fluid is an upward force equal to the weight of the fluid the object has displaced, and describe how this can be used to predict if an object will float or sink in a given fluid.