Kansas State Department of Education Seventh Grade Science Performance Level Descriptors

Academic Warning	Approaches Standard	Meets Standard	Exceeds Standard	Exemplary
A student scoring at the academic warning level always performs inconsistently and/or inaccurately when working on all grade-level science tasks. The student struggles to demonstrate content knowledge, scientific processes and connections. The student seldom • identifies testable questions; design and conduct investigations • identifies relationships to draw conclusions; communicate procedures, results, and explanations • evaluates the work of others • understands the history and nature of science • understands scientific knowledge relative to personal health • understands the effects of human activity on the environment The student in using physical science skills/concepts is inaccurate when • classifying states of matter • identifying relationships of atoms, elements, and compounds • measuring and graphing the effects of temperature on matter • recognizing examples of Newton's Laws of Motion; graph motion of an object • understanding how simple machines multiply force • understanding the transform and movement of energy (heat, light, and conservation of energy) The student in using life science skills/concepts is inaccurate when understanding • structures of organisms and relate their function to their structure • differences between sexual and asexual reproduction • cell theory • the effects of the environment on an organism • the interactions of populations within an ecosystem to include components and movement of energy through a food web	A student scoring at the approaches standard level usually performs inconsistently and/or inaccurately when working on most grade-level science tasks. The student demonstrates limited content knowledge, scientific processes and connections. The student sometimes • identifies testable questions; design and conduct investigations • identifies relationships to draw conclusions; communicate procedures, results, and explanations • evaluates the work of others • understands the history and nature of science • understands scientific knowledge relative to personal health • understands the effects of human activity on the environment The student in using physical science skills/concepts is rarely accurate when • classifying states of matter • identifying relationships of atoms, elements, and compounds • measuring and graphing the effects of temperature on matter • recognizing examples of Newton's Laws of Motion; graph motion of an object • understanding how simple machines multiply force • understanding the transform and movement of energy (heat, light, and conservation of energy) The student in using life science skills/concepts is rarely accurate when understanding • structures of organisms and relate their function to their structure • differences between sexual and asexual reproduction • cell theory • the effects of the environment on an organism • the interactions of populations within an ecosystem to include components and movement of energy through a food web	A student scoring at the meets standard level usually performs consistently and accurately when working on most grade-level science tasks. The student demonstrates sufficient content knowledge, scientific processes and connections. The student usually • identifies testable questions; design and conduct investigations • identifies relationships to draw conclusions; communicate procedures, results, and explanations • evaluates the work of others • understands the history and nature of science • understands scientific knowledge relative to personal health • understands the effects of human activity on the environment The student in using physical science skills/concepts is usually accurate when • classifying states of matter • identifying relationships of atoms, elements, and compounds • measuring and graphing the effects of temperature on matter • recognizing examples of Newton's Laws of Motion; graph motion of an object • understanding how simple machines multiply force • understanding the transform and movement of energy (heat, light, and conservation of energy) The student in using life science skills/concepts is usually accurate when understanding • structures of organisms and relate their function to their structure • differences between sexual and asexual reproduction • cell theory • the effects of the environment on an organism • the interactions of populations within an ecosystem to include components and movement of energy through a food web	A student scoring at the exceeds standard level usually performs consistently and accurately when working on all grade-level science tasks. The student demonstrates well-developed content knowledge, scientific processes and connections. The student consistently • identifies testable questions; design and conduct investigations • identifies relationships to draw conclusions; communicate procedures, results, and explanations • evaluates the work of others • understands the history and nature of science • understands scientific knowledge relative to personal health • understands the effects of human activity on the environment The student in using physical science skills/concepts is accurate when • classifying states of matter • identifying relationships of atoms, elements, and compounds • measuring and graphing the effects of temperature on matter • recognizing examples of Newton's Laws of Motion; graph motion of an object • understanding how simple machines multiply force • understanding the transform and movement of energy (heat, light, and conservation of energy) The student in using life science skills/concepts is accurate when understanding • structures of organisms and relate their function to their structure • differences between sexual and asexual reproduction • cell theory • the effects of the environment on an organism • the interactions of populations within an ecosystem to include components and movement of energy through a food web	A student scoring at the exemplary level always performs consistently and accurately when working on all grade-level science tasks. The student demonstrates highly-developed content knowledge, scientific processes and connections. The student consistently • identifies testable questions; design and conduct investigations • identifies relationships to draw conclusions; communicate procedures, results, and explanations • evaluates the work of others • understands the history and nature of science • understands scientific knowledge relative to personal health • understands the effects of human activity on the environment The student in using physical science skills/concepts is highly accurate when • classifying states of matter • identifying relationships of atoms, elements, and compounds • measuring and graphing the effects of temperature on matter • recognizing examples of Newton's Laws of Motion; graph motion of an object • understanding how simple machines multiply force • understanding the transform and movement of energy (heat, light, and conservation of energy) The student in using life science skills/concepts is highly accurate when understanding • structures of organisms and relate their function to their structure • differences between sexual and asexual reproduction • cell theory • the effects of the environment on an organism • the interactions of populations within an ecosystem to include components and movement of energy through a food web

Created Jan. 17, 2008 by Nancy Bloomcamp, Randy Mousley, Sharron Spence, and Shauna Tinich. For more detailed benchmark and indicator content, consult the Kansas Science Curricular Standards (2007) at www.ksde.org.

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• the diversity of living things and relate their adaptations to their survival and extinction The student in using Earth Science skills in inaccurate when understanding • structure of Earth systems • Earth's constructive and destructive forces/processes • Earth processes and their similarities • the classification of stars, planets, and other solar system components • the relationships between the Sun, Moon, and Earth	• the diversity of living things and relate their adaptations to their survival and extinction The student in using earth science skills/concepts is rarely accurate when understanding • structure of Earth systems • Earth's constructive and destructive forces/processes • Earth processes and their similarities • the classification of stars, planets, and other solar system components • the relationships between the Sun, Moon, and Earth	• the diversity of living things and relate their adaptations to their survival and extinction The student in using earth science skills/concepts is usually accurate when understanding • structure of Earth systems • Earth's constructive and destructive forces/processes • Earth processes and their similarities • the classification of stars, planets, and other solar system components • the relationships between the Sun, Moon, and Earth	• the diversity of living things and relate their adaptations to their survival and extinction The student in using earth science skills/concepts is accurate when understanding • structure of Earth systems • Earth's constructive and destructive forces/processes • Earth processes and their similarities • the classification of stars, planets, and other solar system components • the relationships between the Sun, Moon, and Earth	• the diversity of living things and relate their adaptations to their survival and extinction The student in using earth science skills/concepts is highly accurate when understanding • structure of Earth systems • Earth's constructive and destructive forces/processes • Earth processes and their similarities • the classification of stars, planets, and other solar system components • the relationships between the Sun, Moon, and Earth