

State Standard	Stage	Descriptor
12A	A	comparing living and non-living things
12A	A	describing basic needs and characteristics of living things
12A	A	sorting the common key structures and functions for animal and plant groupings
12A	A	classifying common animals by size, color, family units, and shape, and explaining the rationale for the grouping
12A	B	categorizing animals by structures for food-getting and movement
12A	C	classifying plant and animal groupings according to simple taxonomy guides or characteristics (e.g., locomotion, color, habitat, reproduction)
12A	C	categorizing body structures of living organisms to those from fossil studies
12A	C	suggesting why changes over time for individuals and groupings of plants and animals happened
12A	D1	making generalizations of observed patterns
12A	D2	linking characteristics (e.g., habit of walking, kind of teeth, use of appendages) among animals to changes over time
12A	D3	comparing body structures (or functions) from animal fossils that are no longer evident in contemporary animals
12A	D4	distinguishing specific characteristics as learned or inherited in various examples
12A	D4	conducting simple surveys relating to learned behaviors or attitudes of classmates

State Standard	Stage	Descriptor
12A	E2	comparing specific characteristics of offspring with their parents
12A	E2	predicting possible genetic combinations from selected parental characteristics
12A	E3	describing genetic and environmental influences on the features of organisms
12A	E3	distinguishing between inherited and acquired characteristics
12A	E4	distinguishing characteristics as learned or inherited
12A	E4	conducting simple surveys relating to learned behaviors of classmates, and/or family members
12A	F2	investigating the development of organisms and their environmental adaptations over broad time periods

Stage A-B (Grade 1) Stage A-B-C (Grade 2) Stage B-C-D (Grade 3) Stage C-D-E (Grade 4)

Stage D-E-F (Grade 5)

State Standard 12A Students who meet the standard know and apply concepts that explain how living things function, adapt, and change.

Stage A Apply scientific inquiries or technological designs to introduce basic needs, characteristics and component parts of living things.

Stage B Apply scientific inquiries or technological designs to explore common and diverse structures and functions of living things.

Stage C Apply scientific inquiries or technological designs to explore past and present life forms and their adaptations.

- Stage D1** **Apply scientific inquiries or technological designs to explore the patterns of change in life cycles of plants and animals.**
- Stage D2** **Apply scientific inquiries or technological designs to explore the similarities and differences of generations of offspring.**
- Stage D3** **Apply scientific inquiries or technological designs to examine the nature of inheritance in structural and functional features of plants and animals.**
- Stage D4** **Apply scientific inquiries or technological designs to examine the nature of learned behavior in animals.**
- Stage E1** **Apply scientific inquiries or technological designs to explore the patterns of change and stability at the micro- and macroscopic levels of organisms (including humans).**
- Stage E2** **Apply scientific inquiries or technological designs to distinguish the similarities and differences of offspring in organisms (including humans).**
- Stage E3** **Apply scientific inquiries or technological designs to examine the nature of inheritance in structural and functional features of organisms (including humans).**
- Stage E4** **Apply scientific inquiries or technological designs to examine the nature of learned behavior or responses in all organisms (including humans).**
- Stage F1** **Apply scientific inquiries or technological designs to examine the cellular unit.**
- Stage F2** **Apply scientific inquiries or technological designs to examine the patterns of change and stability over time.**
- Stage F3** **Apply scientific inquiries or technological designs to explore the basic roles of genes and chromosomes in transmitting traits over generations.**
- Stage F4** **Apply scientific inquiries or technological designs to examine stimulus-response reactions in organisms.**