



## Playa Festivals and TEKS

The subjects of language arts, mathematics, social studies, science and art are all addressed in a Playa Festival, making it a valuable and justified learning experience for students. TEKS are addressed in hands-on, outdoor learning experiences with guidance from experienced and knowledgeable professionals from many fields. The following is a listing of TEKS addressed during a Playa Festival.

## Science

The greatest impact of a Playa Festival is in Science. Each of the six core requirements in fifth grade science are addressed in the Festival.

- (1) In Grade 5, the study of science includes planning and implementing field and laboratory investigations using scientific methods, analyzing information, making informed decisions, and using tools such as nets and cameras to collect and record information. Students also use computers and information technology tools to support scientific investigations.
  - (2) As students learn science skills, they identify structures and functions of Earth systems including the crust, mantle, and core and the effect of weathering on landforms. Students learn that growth, erosion, and dissolving are examples of how some past events have affected present events. Students learn about magnetism, physical states of matter, and conductivity as properties that are used to classify matter. In addition, students learn that light, heat, and electricity are all forms of energy.
  - (3) Students learn that adaptations can improve the survival of members of a species, and they explore an organism's niche within an ecosystem. Students continue the study of organisms by exploring a variety of traits that are inherited by offspring from their parents and study examples of learned characteristics.
  - (4) Science is a way of learning about the natural world. Students should know how science has built a vast body of changing and increasing knowledge described by physical, mathematical, and conceptual models, and also should know that science may not answer all questions.
  - (5) A system is a collection of cycles, structures, and processes that interact. Students should understand a whole in terms of its components and how these components relate to each other and to the whole. All systems have basic properties that can be described in terms of space, time, energy, and matter. Change and constancy occur in systems and can be observed and measured as patterns. These patterns help to predict what will happen next and can change over time.
  - (6) Investigations are used to learn about the natural world. Students should understand that certain types of questions can be answered by investigations, and that methods, models, and conclusions built from these investigations change as new observations are made. Models of objects and events are tools for understanding the natural world and can show how systems work. They have limitations and based on new discoveries are constantly
- 5.1 (B) make wise choices in the use and conservation of resources and the disposal or recycling of materials. being modified to more closely reflect the natural world.
  - 5.3 (A) analyze, review, and critique scientific explanations, including hypotheses and theories, as to their strengths and weaknesses using scientific evidence and information;  
(B) draw inferences based on information related to promotional materials for products and services;  
(C) represent the natural world using models and identify their limitations;  
(D) evaluate the impact of research on scientific thought, society, and the environment; and  
(E) connect Grade 5 science concepts with the history of science and contributions of scientists.
  - 5.5 Science concepts. The student knows that a system is a collection of cycles, structures, and processes that interact.  
(A) describe some cycles, structures, and processes that are found in a simple system; and  
(B) describe some interactions that occur in a simple system.
  - 5.6 Science concepts. The student knows that some change occurs in cycles. The student is expected to:  
(A) identify events and describe changes that occur on a regular basis such as in daily, weekly, lunar, and seasonal cycles;  
(B) identify the significance of the water, carbon, and nitrogen cycles; and
-

---

## Science Continued

- (C) describe and compare life cycles of plants and animals.
- 5.7 Science concepts. The student knows that matter has physical properties. The student is expected to:  
(C) identify changes that can occur in the physical properties of the ingredients of solutions such as dissolving sugar in water;
- 5.9 Science concepts. The student knows that adaptations may increase the survival of members of a species. The student is expected to:  
(A) compare the adaptive characteristics of species that improve their ability to survive and reproduce in an ecosystem;  
(B) analyze and describe adaptive characteristics that result in an organism's unique niche in an ecosystem; and  
(C) predict some adaptive characteristics required for survival and reproduction by an organism in an ecosystem.
- 5.10 Science concepts. The student knows that likenesses between offspring and parents can be inherited or learned. The student is expected to:  
(A) identify traits that are inherited from parent to offspring in plants and animals;  
(B) give examples of learned characteristics that result from the influence of the environment.
- 5.11 Science concepts. The student knows that certain past events affect present and future events. The student is expected to:  
(A) identify and observe actions that require time for changes to be measurable, including growth, erosion, dissolving, weathering, and flow;  
(B) draw conclusions about "what happened before" using data such as from tree-growth rings and sedimentary rock sequences; and  
(C) identify past events that led to the formation of the Earth's renewable, non-renewable, and inexhaustible resources.
- 5.12 Science concepts. The student knows that the natural world includes earth materials and objects in the sky. The student is expected to:  
(A) interpret how land forms are the result of a combination of constructive and destructive forces such as deposition of sediment and weathering;

## Language Arts

- 5.17 Writing. Students write about their own experiences. Students are expected to write a personal narrative that conveys thoughts and feelings about an experience.
- 5.27 Listening and Speaking/Listening. Students use comprehension skills to listen attentively to others in formal and informal settings. Students continue to apply earlier standards with greater complexity. Students are expected to:  
(A) listen to and interpret a speaker's messages (both verbal and nonverbal) and ask questions to clarify the speaker's purpose or perspective;  
(B) follow, restate, and give oral instructions that include multiple action steps; and  
(C) determine both main and supporting ideas in the speaker's message.

## Mathematics

- 5.14 Underlying processes and mathematical tools. The student applies Grade 5 mathematics to solve problems connected to everyday experiences and activities in and outside of school.  
(A) identify the mathematics in everyday situations;
-

## Social Studies

- 5.5 History. The student understands important issues, events, and individuals of the 20th century in the United States. The student is expected to:
- (A) analyze various issues and events of the 20th century such as urbanization, industrialization, increased use of oil and gas, world wars, and the Great Depression;
- 5.7 Geography. The student understands the concept of regions. The student is expected to:
- (B) describe a variety of regions in the United States such as landform, climate, and vegetation regions that result from physical characteristics;
- 5.9 Geography. The student understands how people adapt to and modify their environment. The student is expected to:
- (A) describe ways people have adapted to and modified their environment in the United States, past and present;
  - (B) identify reasons why people have adapted to and modified their environment in the United States, past and present, such as the use of human resources to meet basic needs; and
  - (C) analyze the consequences of human modification of the environment in the United States, past and present.
- 5.24 Science, technology, and society. The student understands the impact of science and technology on life in the United States. The student is expected to:
- (D) analyze environmental changes brought about by scientific discoveries and technological innovations such as air conditioning and fertilizers;
  - (E) predict how future scientific discoveries and technological innovations could affect life in the United States.
- 5.26 Social studies skills. The student communicates in written, oral, and visual forms. The student is expected to:
- (B) incorporate main and supporting ideas in verbal and written communication;
  - (C) express ideas orally based on research and experiences;
  - (D) create written and visual material such as journal entries, reports, graphic

## Art

- 5.1 Perception. The student develops and organizes ideas from the environment. The student is expected to:
- (A) communicate ideas about feelings, self, family, school, and community, using sensory knowledge and life experiences; and organizers, outlines, and bibliographies;
- 5.2 Creative expression/performance. The student expresses ideas through original artworks, using a variety of media with appropriate skill. The student is expected to:
- (A) combine information from direct observation, experience, and imagination to express ideas about self, family, and community;
  - (B) compare relationships between design and everyday life; and
  - (C) create original artworks and explore photographic imagery, using a variety of art materials and media appropriately.
-