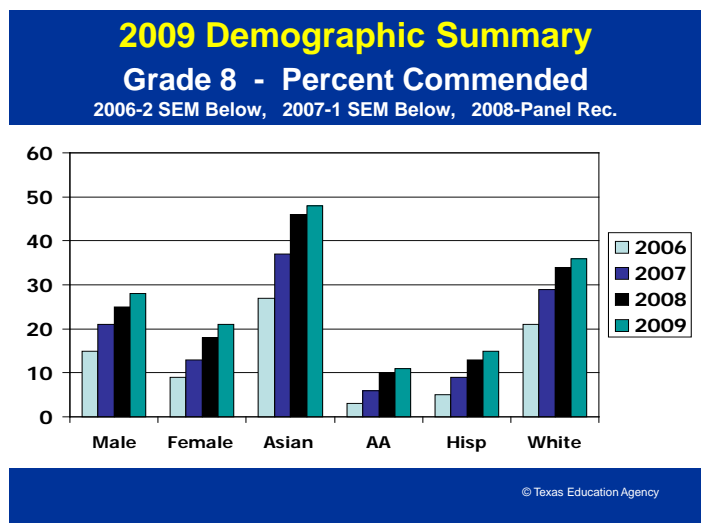
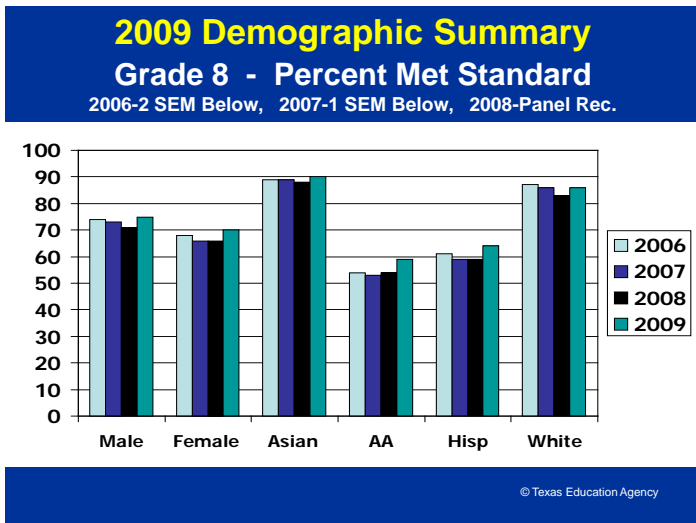
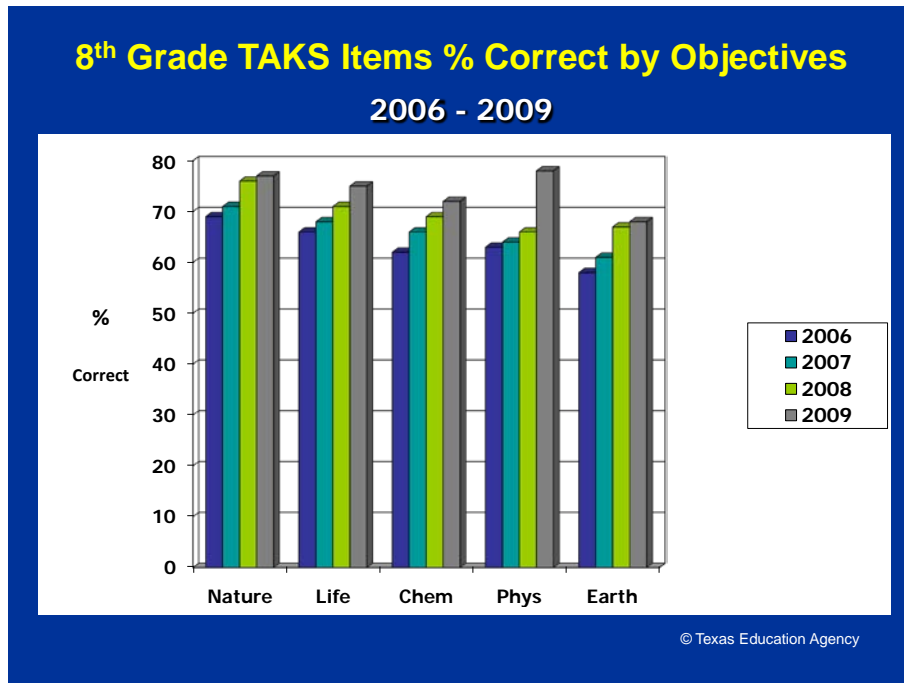


Eighth grade students have increased their performance on the science TAKS during the past four years. Substantial growth in the area of physics performance was made during the spring 2009 administration. Of all five science TAKS objectives, the concepts of Earth and Space Systems are the lowest area of performance statewide. In regard to demographics, efforts need to be made to close the gap between gender performance and among ethnicity performance.



8th Grade Science TAKS – Statewide Spring 2009 Results by Objective *Student Expectations (SEs) Falling Below 70% Correct Response*

Objective 1: The student will demonstrate an understanding of the nature of science.

<u>SE</u>	<u>%</u>	<u>Description</u>
8.2D	65%	communicate valid conclusions (Question 16)
8.3A	54%	analyze, review, and critique scientific explanations, including hypotheses and theories, as to their strengths and weaknesses using scientific evidence and information (Question 14)
8.3B	57%	draw inferences based on data [related to promotional materials] for products and services (Questions 28)

Objective 2: The student will demonstrate an understanding of living systems and the environment.

<u>SE</u>	<u>%</u>	<u>Description</u>
7.12D	57%	observe and describe the role of ecological succession in ecosystems (Question 26)
8.11B	65%	distinguish between inherited traits and other characteristics that result from interactions with the environment (Question 32)
8.11C	66%	make predictions about possible outcomes of various genetic combinations of inherited characteristics (Question 42)

Objective 3: The student will demonstrate an understanding of the structures and properties of matter.

<u>SE</u>	<u>%</u>	<u>Description</u>
7.7C	54%	recognize that compounds are composed of elements (Question 36)
8.10A	56%	illustrate interactions between matter and energy including specific heat (Question 23)

Objective 4: The student will demonstrate an understanding of motion, forces, and energy.

<u>SE</u>	<u>%</u>	<u>Description</u>
8.7B	67%	recognize that waves are generated and can travel through different media (Question 25)

Objective 5: The student will demonstrate an understanding of earth and space systems.

<u>SE</u>	<u>%</u>	<u>Description</u>
7.13B	57%	relate the Earth's movement and the moon's orbit to the observed cyclical phases of the moon (Question 21)
7.14B	57%	analyze effects of regional erosional deposition and weathering (Question 24)
8.10B	57%	describe interactions among solar, weather, and ocean systems (Question 27)
8.12A	61%	analyze and predict the sequence of events in the lunar and rock cycles (Question 31)
8.14B	53%	analyze how natural or human events may have contributed to the extinction of some species (Question 18)
8.14C	68%	describe how human activities have modified soil, water, and air quality (Question 9)

SPECIAL NOTE: The Texas Essential Knowledge and Skills (TEKS) in middle school science are to be taught prior to the 8th grade science Texas Assessment of Knowledge and Skills (TAKS). All of the middle school science TEKS can be found at <http://ritter.tea.state.tx.us/rules/tac/chapter112/index.html>. The subset of the middle school science TEKS that are eligible on the middle school science TAKS can be found at <http://ritter.tea.state.tx.us/student.assessment/taks/booklets/science/g8e.pdf>. Students have shown steady growth in science performance during the past four years. It is the intent of this document to highlight the specific student expectations from the 2009 TAKS results that indicate a performance level less than 70% correct response statewide.