Texas Essential Knowledge and Skills (T.E.K.S)

English Language Arts- Grade 5

Knowledge and Skills

- 5.b.1 Reading/Fluency. Students read grade-level text with fluency and comprehension. Students are expected to read aloud grade-level stories with fluency (rate, accuracy, expression, appropriate phrasing) and comprehension.

- 5.b.2.B Reading/Vocabulary Development. Students understand new vocabulary and use it when reading and writing. Students are expected to: (B) use context (e.g., in-sentence restatement) to determine or clarify the meaning of unfamiliar or multiple meaning words.

- 5.b.9 Reading/Comprehension of Text/Independent Reading. Students read independently for sustained periods of time and produce evidence of their reading. Students are expected to read independently for a sustained period of time and summarize or paraphrase what the reading was about, maintaining meaning and logical order (e.g., generate a reading log or journal; participate in book talks).

- 5.b.13.A Reading/Comprehension of Informational Text/Procedural Texts. Students understand how to glean and use information in procedural texts and documents. Students are expected to: (A) interpret details from procedural text to complete a task, solve a problem, or perform procedures.

- 5.b.26 Research/Organizing and Presenting Ideas. Students organize and present their ideas and information according to the purpose of the research and their audience. Students are expected to draw conclusions through a brief written explanation and create a works-cited page from notes, including the author, title, publisher, and publication year for each source used.

- 5.b.27.A 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 message (both verbal and non-verbal) and ask questions to clarify the speaker’s purpose or perspective.

- 5.b.29 Listening and Speaking/Teamwork. Students work productively with others in teams. Students continue to apply earlier standards with greater complexity. Students are expected to participate in student-led discussions by eliciting and considering suggestions from other group members and by identifying points of agreement and disagreement.
English Language Arts - Grade 6

Knowledge and Skills

- 6.b.2.B Reading/Vocabulary Development. Students understand new vocabulary and use it when reading and writing.
- 6.b.10.A Reading/Comprehension of Informational Text/Expository Text. Students analyze, make inferences and draw conclusions about expository text and provide evidence from text to support their understanding.
- 6.b.12.B Reading/Comprehension of Informational Text/Procedural Texts. Students understand how to glean and use information in procedural texts and documents. Students are expected to:
  (B) interpret factual, quantitative, or technical information presented in maps, charts, illustrations, graphs, timelines, tables, and diagrams.
- 6.b.23.C Research/Gathering Sources. Students determine, locate, and explore the full range of relevant sources addressing a research question and systematically record the information they gather.
- 6.b.26.C Listening and Speaking/Listening. Students will use comprehension skills to listen attentively to others in formal and informal settings. Students will continue to apply earlier standards with greater complexity.
- 6.b.28 Listening and Speaking/Teamwork. Students work productively with others in teams. Students will continue to apply earlier standards with greater complexity.

English Language Arts- Grade 7

Knowledge and Skills

- 7.b.2.B Reading/Vocabulary Development. Students understand new vocabulary and use it when reading and writing.
- 7.b.28 Listening and Speaking/Teamwork. Students work productively with others in teams. Students will continue to apply earlier standards with greater complexity.
English Language Arts - Grade 8

Knowledge and Skills

- 8.b.2.B Reading/Vocabulary Development. Students understand new vocabulary and use it when reading and writing.
- 8.b.10.A Comprehension of Informational Text/Expository Text. Students analyze, make inferences and draw conclusions about expository text and provide evidence from text to support their understanding.
- 8.b.25.A Research/Organizing and Presenting Ideas. Students organize and present their ideas and information according to the purpose of the research and their audience.
- 8.b.28 Listening and Speaking/Teamwork. Students work productively with others in teams. Students will continue to apply earlier standards with greater complexity.

English Language Arts- High School Knowledge and Skills

- HS.b.11.B Reading/Comprehension of Informational Text/Procedural Texts. Students understand how to glean and use information in procedural texts and documents. Students are expected to: analyze factual, quantitative, or technical data presented in multiple graphical sources.

- HS.b.24.A Listening and Speaking/Listening. Students will use comprehension skills to listen attentively to others in formal and informal settings. Students will continue to apply earlier standards with greater complexity. Students are expected to: (A) listen responsively to a speaker by taking notes that summarize, synthesize, or highlight the speaker’s ideas for critical reflection and by asking questions related to the content for clarification and elaboration.

- HS.b.25 Listening and Speaking/Speaking. Students speak clearly and to the point, using the conventions of language. Students will continue to apply earlier standards with greater complexity. Students are expected to give presentations using informal, formal, and technical language effectively to meet the needs of audience, purpose, and occasion, employing eye contact, speaking rate (e.g., pauses for effect), volume, enunciation, purposeful gestures, and conventions of language to communicate ideas effectively.

- HS.b.26 Listening and Speaking/Teamwork. Students work productively with others in teams. Students will continue to apply earlier standards with greater complexity. Students are expected to participate productively in teams, building on the ideas of others, contributing relevant information, developing a plan for consensus-building, and setting ground rules for decision-making.
Science - Grade 5

Knowledge and Skills

- 5.b.1.A Scientific investigation and reasoning. The student conducts classroom and outdoor investigations, following home and school safety procedures and environmentally appropriate and ethical practices. The student is expected to: (A) demonstrate safe practices and the use of safety equipment as described in the Texas Safety Standards during classroom and outdoor investigations.

- 5.b.2.F Scientific investigation and reasoning. The student uses scientific methods during laboratory and outdoor investigations. The student is expected to: (F) communicate valid conclusions in both written and verbal forms.

- 5.b.3.D Scientific investigation and reasoning. The student uses critical thinking and scientific problem solving to make informed decisions. The student is expected to: (D) connect grade-level appropriate science concepts with the history of science, science careers, and contributions of scientists.

- 5.b.4.A Scientific investigation and reasoning. The student knows how to use a variety of tools and methods to conduct science inquiry. The student is expected to: (A) collect, record, and analyze information using tools, including calculators, microscopes, cameras, computers, hand lenses, metric rulers, Celsius thermometers, prisms, mirrors, pan balances, triple beam balances, spring scales, graduated cylinders, beakers, hot plates, meter sticks, magnets, collecting nets, and notebooks; timing devices, including clocks and stopwatches; and materials to support observations of habitats or organisms such as terrariums and aquariums.
Science - Grade 6

Knowledge and Skills

- 6.b.2.C Scientific investigation and reasoning. The student uses scientific inquiry methods during laboratory and field investigations.
- 6.b.3.A Scientific investigation and reasoning. The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions and knows the contributions of relevant scientists.
- 6.b.4.A Scientific investigation and reasoning. The student knows how to use a variety of tools and safety equipment to conduct science inquiry.

Science - Grade 7

Knowledge and Skills

- 7.b.2.C Scientific investigation and reasoning. The student uses scientific inquiry methods during laboratory and field investigations.
- 7.b.3.A Scientific investigation and reasoning. The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions and knows the contributions of relevant scientists.
- 7.b.4.A Science investigation and reasoning. The student knows how to use a variety of tools and safety equipment to conduct science inquiry.

Science - Grade 8

Knowledge and Skills

- 8.b.2.C Scientific investigation and reasoning. The student uses scientific inquiry methods during laboratory and field investigations.
- 8.b.3.A Scientific investigation and reasoning. The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions and knows the contributions of relevant scientists.
- 8.b.4.A Scientific investigation and reasoning. The student knows how to use a variety of tools and safety equipment to conduct science inquiry.
Science - High School Knowledge and Skills Integrated Physics and Chemistry

- HS.c.2.B Scientific processes. The student uses scientific methods during laboratory and field investigations. The student is expected to: (B) plan and implement investigative procedures, including asking questions, formulating testable hypotheses, and selecting equipment and technology
- HS.c.2.C Scientific processes. The student uses scientific methods during laboratory and field investigations. The student is expected to: (C) collect data and make measurements with precision
- HS.c.2.D Scientific processes. The student uses scientific methods during laboratory and field investigations. The student is expected to: (D) organize, analyze, evaluate, make inferences, and predict trends from data
- HS.c.2.E Scientific processes. The student uses scientific methods during laboratory and field investigations. The student is expected to: (E) communicate valid conclusions

Physics – High School Knowledge and Skills

- HS.c.2.H Scientific processes. The student uses a systematic approach to answer scientific laboratory and field investigative questions. The student is expected to: (H) make measurements with accuracy and precision and record data using scientific notation and International System (SI) units
- HS.c.2.J Scientific processes. The student uses a systematic approach to answer scientific laboratory and field investigative questions. The student is expected to: (J) organize and evaluate data and make inferences from data, including the use of tables, charts, and graphs
- HS.c.2.K Scientific processes. The student uses a systematic approach to answer scientific laboratory and field investigative questions. The student is expected to: (K) communicate valid conclusions supported by the data through various methods such as lab reports, labeled drawings, graphic organizers, journals, summaries, oral reports, and technology-based reports.

Mathematics- Grade 5

Knowledge and Skills

- 5.b.1.A Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to: (A) apply mathematics to problems arising in everyday life, society, and the workplace.

- 5.b.1.B Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to: (B) use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy,
determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution.

- 5.b.1.C Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to: (C) select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems.

**Mathematics- High School Knowledge and Skills**

- HS.c.1.A Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to: (A) apply mathematics to problems arising in everyday life, society, and the workplace
- HS.c.1.C Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to: (C) select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems
- HS.c.1.D Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to: (D) communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate
- HS.c.1.E Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to: (E) create and use representations to organize, record, and communicate mathematical ideas
- HS.c.1.F Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to: (F) analyze mathematical relationships to connect and communicate mathematical ideas

**Algebra 1**

- Hs.c.12.E Number and algebraic methods. The student applies the mathematical process standards and algebraic methods to write, solve, analyze, and evaluate equations, relations, and functions. The student is expected to: (E) solve mathematic and scientific formulas, and other literal equations, for a specified variable.