

2020

Planting the Seed
Curriculum
Alignment

Grades 2-5

Second Grade Concepts Addressed Science TEKS

- 1A) hand washing
- 1B) safety on the farm & machinery
- 1B) water cycle
- 1B) natural resources
- 2A) ask questions about organisms
- 2B) plan & conduct how org. grow
- 2C) data collections
- 2D) meas. & recording of plant growth
- 2E) communicate observations
- 2F) compare and communicate results
- 3A) identify and solve problems
- 3B) make predictions
- 3C) farmers as scientists
- 4A) weather instruments/rain gauges
- 4B) measure & compare organisms
- 5A) classify soil types
- 5B) light & heat energy, & plant growth
- 5D) sand/silt/clay/organic matter
- 6A) light's effect on plants
- 7A) soil particle size
- 7B) salt water/fresh water
- 7C) water as a resource
- 8A) graph weather information
- 8B) cold & warm season crops
- 9A) plant needs
- 9B) growing seasons for crops
- 9B) plant growth cycles
- 9C) organisms and soil
- 10A) cattle + forage = beef
- 10A) animal basic needs
- 10B) describe student's plant growth
- 10B) plant parts and their use

Second Grade Concepts Addressed Mathematics TEKS

- 1A) apply math to everyday problems
- 1C) tools & techniques to solve problems
- 1D) graphing plant growth
- 1E) create & use representations to communicate math ideas
- 1F) analyze and compare plant growth
- 1G) display and justify math ideas using precise math language
- 4A) recall basic facts and add & subtract within 20
- 4B) add up to four two-digit numbers & subtract
- 9A) find the length of objects with standard units of length
- 9D) determine the length of object using measuring tool
- 10A) explain the length of bar graph and what it represents
- 10B) graph plant growth data on a bar graph
- 10C) write and solve word problems from a bar graph
- 10D) draw conclusions and make predictions from graph; plant growth predictions

Second Grade Concepts Addressed Language Arts and Reading TEKS

- 18A) literary texts
- 19A) expository and procedural texts
- 19B) thank you note to a farmer
- 20) develop persuasive texts
- 21A) use proper parts of speech
- 21B) complete sentences
- 21C) statement vs. questions
- 22A) write legibly
- 22B) proper capitalization
- 22C) proper punctuation
- 23A) phonetics
- 23B) proper spelling & orthographic patterns
- 23C) spell high-frequency words
- 23D) base words & endings
- 23E) contractions
- 23F) use resources for spelling
- 24A) generate questions
- 24B) relevant sources for info
- 25A) gather evidence from experts
- 25B) use text to locate info
- 25C) graph plant growth
- 26) clarify research questions
- 27) visually display research
- 28A) listen attentively
- 29) speak clearly & on topic
- 30) work in teams to participate in discussion & ask questions

Third Grade Concepts Addressed Science TEKS

- 1A) safety on the farm & machinery
- 1B) conservation of resources
- 2A) ask questions about organisms
- 2B) collect data
- 2C) use of bar graphs to record data
- 2D) analyze data to provide explanations
- 2F) communicate valid conclusions
- 3A) critical thinking in scientific observations
- 3B) infer & evaluate accuracy of food labels
- 3D) farmer's role as scientists
- 4A) weather instruments such as rain gauges
- 5B) solid/liquid/gas of the water cycle
- 5C) light/heat energy from the sun
- 5D) mixture-sand, silt, and clay=loam
- 6A) types of energy used
- 7A) soil formation by weathering & decomposition
- 7C) how nat. resources are used in products
- 8A) role of weather changes in crops
- 8B) sun's role in the water cycle
- 9A) environments suitable for farming
- 9B) food chain, pollinators
- 9C) environmental changes such as floods/droughts
- 10A) plant structures & survival
- 10B) life cycle changes of a plant

Third Grade Concepts Addressed Mathematics TEKS

- 1A) *apply math to everyday problems*
- 1B) *problem solving model including steps*
- 1C) *tools & techniques to solve problems*
- 1D) *graphing plant growth*
- 1E) *create & use representations to communicate math ideas*
- 1F) *analyze and compare plant growth*
- 1G) *display and justify math ideas using precise math language*
- 4A) add & subtract within 1000**
- 4B) round to nearest 10th, measuring plants in mm
- 8A) summarize data with bar graph**
- 8B) solve one- or two-step problems with bar graph

Italics = STAAR Process Standard

Bold = STAAR Readiness Standard

Third Grade Concepts Addressed Language Arts and Reading TEKS

- 18A) literary texts
- 19) write about personal experiences
- 20B) thank you note to farmers
- 21) write persuasive texts
- 22A) use proper parts of speech
- 22B) complete sentences
- 22C) subject/verb agreement
- 23A) write legibly
- 23B) proper capitalization
- 23C) proper punctuation
- 23D) paragraph indentions
- 24A) word segmentation to spell
- 24B) proper spelling & orthographic patterns
- 24C) spell high-frequency words
- 24D) words with common syllable construction
- 24F) contractions
- 24G) use resources for spelling
- 25A) generate questions
- 25B) relevant sources for info
- 26A) gather evidence from experts
- 27) use info from experts to clarify questions
- 29A) listen attentively
- 30) speak clearly & on topic
- 31) work in teams to participate in discussion & ask questions

Fourth Grade Concepts Addressed Science TEKS

- 1A) safety on the farm & machinery
- 1B) conservation of natural resources
- 2A) ask questions about organisms
- 2B) collect data
- 2C) use of bar graphs to record data
- 2D) analyze data to provide explanations
- 2F) communicate valid conclusions
- 3A) critical thinking in scientific observations
- 3B) infer & evaluate accuracy of food labels
- 3D) farmer's role as scientists
- 4A) observations in the natural world
- 5A) water cycle and the states of matter
- 5B) mixtures of soil
- 6A) types of energy used
- 7A) properties of soil & ability to support plants
- 7B) erosion
- 7C) renewable vs. non-renewable resources
- 8A) weather predictions & changes
- 8B) water conservation/irrigation
- 9A) producers' needs vs. consumers' needs for food
- 9B) food webs
- 10A) adaptations
- 10B) inherited traits
- 10C) compare life cycles

Fourth Grade Concepts Addressed Mathematics TEKS

- 1A) apply math to everyday problems*
- 1B) problem solving model including steps*
- 1C) tools & techniques to solve problems*
- 1D) graphing plant growth*
- 1E) create & use representations to communicate math ideas*
- 1F) analyze and compare plant growth*
- 1G) display and justify math ideas using precise math language*
- 4A) add & subtract whole numbers and decimals**
- 8A) measurement units within customary or metric**

Italics = STAAR Process Standard

Bold = STAAR Readiness Standard

Fourth Grade Concepts Addressed Language Arts and Reading TEKS

- 16A) literary texts
- 17) write about personal experiences
- 18B) thank you note to farmers
- 19) write persuasive texts
- 20A) use proper parts of speech**
- 20B) complete subject sentences**
- 20C) subject/verb agreement
- 21A) write legibly
- 21B) proper capitalization**
- 21C) proper punctuation**
- 22A) proper spelling & orthographic patterns**
- 22B) base words & roots with affixes
- 22D) use resources for spelling
- 23A) generate questions
- 23B) relevant sources for info
- 24A) gather evidence from experts
- 25) use info from experts to clarify questions
- 27A) listening and speaking skills
- 28) speak clearly & on topic
- 29) work in teams to participate in discussion & ask questions

Bold = STAAR Readiness Standard

Fifth Grade Concepts Addressed Science TEKS

- 1A) *safety on the farm & machinery*
- 2B) *ask questions about organisms*
- 2C) *collect data*
- 2D) *analyze data to provide explanations*
- 2F) *communicate valid conclusions*
- 3A) *critical thinking in scientific observations*
- 3B) *infer & evaluate accuracy of food labels*
- 3C) *farmer's role as scientists*
- 4A) *observations in the natural world*
- 5A) water cycle and the states of matter**
- 5B) mixtures of soil
- 6A) types of energy used**
- 7B) erosion**
- 8A) weather vs. climate
- 8B) sun's effect on water cycle
- 9A) organisms interaction with environment**
- 9B) flow of energy through food webs**
- 9C) organisms influence on environment
- 9D) carbon dioxide cycle importance to plants
- 10A) structures of different species**
- 10B) inherited traits**

Italics = STAAR Scientific Investigation & Reasoning Skills

Bold = STAAR Readiness Standard

Fifth Grade Concepts Addressed Mathematics TEKS

- 1A) apply math to everyday problems
- 1B) problem solving model including steps
- 1C) tools & techniques to solve problems
- 1D) graphing plant growth
- 1E) create & use representations to communicate math ideas
- 1F) analyze and compare plant growth
- 1G) display and justify math ideas using precise math language
- 2C) round decimals when charting plant growth
- 3A) estimate to determine solutions to real-world problems
- 7) measurement units within customary or metric
- 9A) chart plant growth on a bar graph

Fifth Grade Concepts Addressed Language Arts and Reading TEKS

- 16) literary texts
- 17) write about personal experiences
- 18B) thank you note to farmers
- 19) write persuasive texts
- 20A) use proper parts of speech
- 20B) complete subject sentences
- 20C) subject/verb agreement
- 21A) proper capitalization
- 21B) proper punctuation
- 22A) proper spelling & orthographic patterns
- 22D) use resources for spelling
- 23A) generate questions
- 24A) gather evidence from experts
- 25A) use info from experts to clarify questions
- 27A) listening to speakers message
- 27C) main & supporting ideas of speakers message
- 28) speak clearly & on topic
- 29) work in teams to participate in discussion & ask questions