Science TEKS K-8
Review Dr. Cat Howard/Texarkana College

Kindergarten

Topic	Discussion
Lab/nature of science	1D—like the list of tools relative to studying science 2C—wonder what mathematical concepts are possible for K?
models	
matter	5—Like the new wording “and its interactions” All other edit, I think are useful and clearer
Energy/motion/force	7—looks like the energy topic is light. Not sure what “deep dive” means.
Earth and Space	I agree with all of the proposed changes
Organisms and Environment	I agree with all of the proposed changes.

The Kindergarten TEKS seems to me to be complete, logical, adequate, and aligned. The rewrites make them much clearer and easier to accomplish. None seem to be duplicated or unnecessary. I agree that focusing on one particular kind of energy/grade level might be appropriate-but not sure what “deep dive” means. Another question that I have is how much class time is devoted to experiments and lab activities?

First Grade

Topic	Discussion
Lab/nature of science	1D—like the list of tools relative to studying science 1F—like how data will be recorded and organized with pictures etc. 4A-I like linking innovation and scientific knowledge to helping others
models	Good to highlight usefulness and limitations of models
matter	5—Like the new wording “and its interactions” and that matter can be understood by properties and interactions. 5B—like the addition of the word “predict”
Energy/motion/force	7—looks like the energy topic is magnetism. Not sure what “deep dive” means.
Earth and Space	I agree with all of the proposed changes 9A—like the use of “investigate and document” instead of observe 10A—like “generate examples and practical uses for”
Organisms and Environment	I agree with all of the proposed changes. 12A—like “identify and compare” instead of investigate

The Grade 1 TEKS seems to me to be complete, logical, adequate, and aligned. The rewrites make them much clearer and easier to accomplish. None seem to be duplicated or unnecessary. I agree that focusing on one particular kind of energy/grade level might be appropriate-but not sure what “deep dive” means. Another question that I have is how much class time is devoted to experiments and lab activities?

Second Grade

Topic	Discussion
Lab/nature of science	1D—like the list of tools relative to studying science 1F—like how data will be recorded and organized with pictures etc. 4A-I like linking innovation and scientific knowledge to helping others
models	Good to highlight usefulness and limitations of models
matter	5—Like the new wording “and its interactions” and that matter can be understood by properties and interactions. 5B—like the addition of the word “predict” 5C—like the introduction of mixtures here
Energy/motion/force	7—looks like the energy topic is sound. 6A-like the expansion of forces beyond push/pull of magnetism
Earth and Space	I agree with all of the proposed changes 8A—solar composition and properties are good here 9A—wind and water good 10B—glad to see recycling
Organisms and Environment	I agree with all of the proposed changes. 11A—temperature and precipitation good additions here 11C, 12A—introduction of botany 12B, C—introduction of zoology

The Grade 2 TEKS seems to me to be complete, logical, adequate, and aligned. The rewrites make them much clearer and easier to accomplish. None seem to be duplicated or unnecessary. I agree that focusing on one particular kind of energy/grade level is appropriate. It seems like a pretty big jump in the amount of science added from grade 1—but I think the K and 1 TEKS provided adequate preparation. I’m still not seeing how much class time is devoted to experiments and lab activities.

Third Grade

Topic	Discussion
Lab/nature of science	1D—like the list of tools relative to studying science 1F—like the use of graphic organizers 4B—like STEM career exploration
models	Good to highlight usefulness and limitations of models
matter	5A—measurements: temp, volume, mass, density, magnetism 5B, C-physical states 5D—a little strange—maybe means properties of various mixtures?
Energy/motion/force	6A, B—how motion is affect by force 8A-review of types of energy from K-2 8B—introduction of idea of mechanical energy
Earth and Space	I agree with all of the proposed changes 8-addition of solar system
Organisms and Environment	11B—food chain 11C—environmental adaptations 12B—life cycles

The Grade 3 TEKS seems to me to be complete, logical, adequate, and aligned. The rewrites make them much clearer and easier to accomplish. None seem to be duplicated or unnecessary. I like the progression of detail through the K through 3 TEKS. It seems logical to me and sensible.. I'm still not seeing how much class time is devoted to experiments and lab activities.

Fourth Grade

Topic	Discussion
Lab/nature of science	1D—like the list of tools relative to studying science 1F—like the use of graphic organizers 3A—like explanations supported by data and models
models	Good to highlight usefulness and limitations of models
matter	5A—measurements: temp, volume, mass, density, magnetism 5B, properties of solutions
Energy/motion/force	6A- static electricity and friction 8C--electricity
Earth and Space	I agree with all of the proposed changes 8B—lunar cycles
Organisms and Environment	11A—photosynthesis 11C—fossil evidence 12B—introductory genetics

The Grade 4 TEKS seems to me to be complete, logical, adequate, and aligned. The rewrites make them much clearer and easier to accomplish. None seem to be duplicated or unnecessary. I like the progression of detail through the K through 4 TEKS with the additions of friction, electricity, lunar cycles, photosynthesis, fossil evidence, and introductory genetics. It seems logical to me and sensible. I'm still not seeing how much class time is devoted to experiments and lab activities.

Fifth Grade

Topic	Discussion
Lab/nature of science	1D—like the list of tools relative to studying science 3A—like explanations supported by data and models
models	
matter	5A—like the change in wording to compare and contrast and list of physical properties 5B, not really sure about this one-is it moving towards the differences between chemical and physical properties or changes? 5D-introduction of atoms
Energy/motion/force	6A—balancing (or not) of forces 7A—investigating types of energy 7B—circuits 7C—introduction to optics
Earth and Space	I agree with all of the proposed changes 8A—Earth rotation
Organisms and Environment	11A—inclusion of biotic and abiotic factors 11B—energy flow in ecosystems 12 A—survival traits 12B—instinctual and learned behavior

The Grade 5 TEKS seems to me to be complete, logical, adequate, and aligned. The rewrites make them much clearer and easier to accomplish. None seem to be duplicated or unnecessary. I like the progression of detail through the K through 5 TEKS with the additions of atomic theory, circuits, light, Earth rotation, energy flow in ecosystems, and survival traits. It seems logical to me and sensible. I'm still not seeing how much class time is devoted to experiments and lab activities.

Sixth Grade

Topic	Discussion
Lab/nature of science	1B—appreciate how this builds on previous topics in lower grades 1C—calculating based on three laws of motion seems like a big jump from grade 5 5—like reoccurring themes 1D—tools seem appropriate 1F—graphs and tables
models	
matter	5—most of these seem to be putting official names on concepts previous covered—but seems to me to be a big jump between grades 5 and 6—lots of new vocabulary all at one time
Energy/motion/force	6. My comment is the same as for 5—although students have been introduced to these topics—suddenly names appear—ie normal forces, kinetic energy, elastic energy etc. Feels like we have skipped a grade!
Earth and Space	9—again same comment as for 5 and 6
Organisms and Environment	11A—cells 11B—hierarchy 11C—prokaryotes, eukaryotes 12A—variations and survival 13A –predatory and symbiotic relationships.

The Grade 6 TEKS seems to me to be complete, logical, adequate, and aligned. The rewrites make them much clearer and easier to accomplish. None seem to be duplicated or unnecessary. To me there seems to be quite a significant increase in the complexity of the material, the needed vocabulary and math skills, and amount of material from grade 5. As I noted above, it almost feels like I've missed a grade between 5 and 6.

Seventh Grade

Topic	Discussion
Lab/nature of science	1, 2, 3, 4—all good
models	
matter	5A—chemical formulas, 5C—solution concentration 5D—rates of solvation
Energy/motion/force	6A—average speed 6B—speed vs. velocity 7AC—thermal energy
Earth and Space	8B—gravity 9A-plate tectonics 10A—human activity and groundwater
Organisms and Environment	11A—organ systems 11B—sexual and asexual reproduction 12A—selection 13C—biodiversity

The Grade7 TEKS seems to me to be complete, logical, adequate, and aligned. The rewrites make them much clearer and easier to accomplish. None seem to be duplicated or unnecessary. The transition from grade 6 to 7 seems reasonable and the topics seem to be appropriate next steps. Is there any guidance on lab time?

Eighth Grade

Topic	Discussion
Lab/nature of science	1, 2, 3, 4—all good
models	
matter	5B— properties of water 5C—acids and bases 5D—conservation of mass
Energy/motion/force	6A—acceleration 6B—Newton's laws 7A,B,C—types and properties of waves
Earth and Space	8A,B,C—star and galaxy lifecycles 9A,B,C-weather 10A—volcanoes 10B—climate change
Organisms and Environment	11A—cellular structure 11B—genes 12A—introduction to population genetics 13A, B—biodiversity, food webs

The Grade 8 TEKS seems to me to be complete, logical, adequate, and aligned. The rewrites make them much clearer and easier to accomplish. None seem to be duplicated or unnecessary. The transition from grade 7 to 8 seems reasonable and the topics seem to be appropriate next steps. Is there any guidance on lab time?