WQED SOS – PA Standards

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5th-6th Grade PA Standards

English Language Arts	Social Studies	Science	Math
CC.1.1.5.D Know and apply grade-level phonics and word analysis skills in decoding words. • Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology to read accurately unfamiliar multisyllabic words. CC.1.1.5.E Read with accuracy and fluency to support comprehension: • Read on-level text with purpose and understanding. • Read on-level text orally with accuracy, appropriate rate, and expression on successive readings. • Use context to confirm or self-correct word recognition and understanding, rereading as necessary. E05.B-K.1.1 Demonstrate understanding of key ideas and details in informational texts. CC.1.2.5.D Analyze multiple accounts of the same event or topic, noting important similarities and differences in the point of view they represent. CC.1.2.5.E Use text structure, in and among texts, to interpret information (e.g., chronology, comparison, cause/effect, problem/ solution). CC.1.2.5.G Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently. CC.1.2.5.I Integrate information from several texts on the same topic to demonstrate understanding of that topic. CC.1.2.5.J Acquire and use accurately grade-appropriate conversational, general academic, and domain-specific words and phrases, including those that signal contrast, addition, and other logical relationships. CC.1.4.5.A Write informative/ explanatory texts to examine a topic and convey ideas and information clearly. CC.1.4.5.B Identify and introduce the topic clearly. CC.1.4.5.C Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic; include illustrations and multimedia when useful to aiding comprehension. CC.1.4.5.D Group related information logically linking ideas within and across categories of information using words, phrases, and clauses; provide a concluding statement or section; include formatting when useful to aiding comprehension.	6.2.5.C Explain how advertising causes people to change their behavior in predictable ways. 7.1.5.B Describe and locate places and regions as defined by physical and human features. 7.2.5.A Describe the characteristics of places and regions. 8.1.5.C Locate primary and secondary sources for the research topic and summarize in writing the findings. (Reference RWSL Standard 1.8.5 Research) 8.2.5.B Illustrate concepts and knowledge of historical documents, artifacts, and places critical to Pennsylvania history. CC.8.5.6-8.A Cite specific textual evidence to support analysis of primary and secondary sources. CC.8.5.6-8.B Determine the central ideas or information of a primary or secondary source; provide an accurate summary of the source distinct from prior knowledge or opinions. CC.8.5.6-8.E Describe how a text presents information (e.g., sequentially, comparatively, causally). CC.8.6.6-8.A Write arguments focused on discipline-specific content. • Introduce claim(s) about a topic or issue, acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically. • Support claim(s) with logical reasoning and relevant, accurate data and evidence that demonstrate an understanding of the topic or text, using credible sources. • Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence. • Establish and maintain a formal style. • Provide a concluding statement or section that follows from and supports the argument presented. CC.8.6.6-8.B Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes. • Introduce a	3.2.5.A6 Understand how theories are developed. Identify questions that can be answered through scientific investigations and evaluate the appropriateness of questions. Design and conduct a scientific investigation and understand that current scientific knowledge guides scientific investigations. Describe relationships using inference and prediction. Use appropriate tools and technologies to gather, analyze, and interpret data and understand that it enhances accuracy and allows scientists to analyze and quantify results of investigations. Develop descriptions, explanations, and models using evidence and understand that these emphasize evidence, have logically consistent arguments, and are based on scientific principles, models, and theories. Analyze alternative explanations and understanding that science advances through legitimate skepticism. Use mathematics in all aspects of scientific inquiry. Understand that scientific investigations may result in new ideas for study, new methods, or procedures for an investigation or new technologies to improve data collection. 3.2.5.B1 Explain how mass of an object resists change to motion. 3.2.5.B2 Examine how energy can be transferred from one form to another. 3.4.5.C1 Explain how the design process is a purposeful method of planning practical solutions to problems. 3.4.5.C2 Describe how design, as a dynamic process of steps, can be performed in different sequences and repeated. 3.4.5.C3 Identify how invention and innovation are creative ways to turn ideas into real things. 3.4.5.D1	CC.2.4.5.A.1 Solve problems using conversions within a given measurement system. CC.2.1.5.B.2 Extend an understanding of operations with whole numbers to perform operations including decimals CC.2.2.5.A.1 Interpret and evaluate numerical expressions using order of operations. M05.A-T.1.1 Demonstrate understanding of place-value of whole numbers and decimals, and compare quantities or magnitudes of numbers. M05.A-F.2.1.1 Solve word problems involving division of whole numbers leading to answers in the form of fractions (including mixed numbers). M05.B-O.1.1 Analyze and complete calculations by applying the order of operations. M05.B-O.2.1 Create, extend, and analyze patterns. M05.B-O.2.1.1 Generate two numerical patterns using two given rules. Example: Given the rule “add 3” and the starting number 0 and given the rule “add 6” and the starting number 0, generate terms in the resulting sequences. M05.D-M.1.1 Solve problems using simple conversions (may include multistep, real-world problems). M05.D-M.1.1.1 Convert between different-sized measurement units within a given measurement system. A table of equivalencies will be provided. Example: Convert 5 cm to meters. M06.A-R.1.1 Represent and/or solve realworld and mathematical problems using rates, ratios, and/or percents. M06.A-R.1.1.4 Solve unit rate problems including those involving unit pricing and constant speed. Example: If it took 7 hours to mow 4 lawns, then at that rate, how many lawns could be mowed in 35 hours? At what rate were lawns being mowed?

CC.1.4.5.E Write with an awareness of style. • Use precise language and domain-specific vocabulary to inform about or explain the topic. • Use sentences of varying length. Demonstrate a grade-appropriate command of the conventions of standard English grammar, usage, capitalization, punctuation, and spelling. CC.1.4.5.G Write opinion pieces on topics or texts. CC.1.4.5.H Introduce the topic and state an opinion on the topic. CC.1.4.5.I Provide reasons that are supported by facts and details; draw from credible sources. CC.1.4.5.J Create an organizational structure that includes related ideas grouped to support the writer's purpose; link opinion and reasons using words, phrases, and clauses; provide a concluding statement or section related to the opinion. CC.1.4.5.K Write with an awareness of style. • Use sentences of varying length. • Expand, combine, and reduce sentences for meaning, reader/listener interest, and style. CC.1.4.5.M Write narratives to develop real or imagined experiences or events. CC.1.4.5.T With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach. CC.1.4.5.V Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic. CC.1.4.5.X Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes and audiences.	topic clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories as appropriate to achieving purpose; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension. • Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples. • Use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts. • Use precise language and domain-specific vocabulary to inform about or explain the topic. • Establish and maintain a formal style and objective tone. • Provide a concluding statement or section that follows from and supports the information or explanation presented. CC.8.6.6-8.C Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. CC.8.6.6-8.F Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration. CC.8.6.6-8.H Draw evidence from informational texts to support analysis reflection, and research. CC.8.6.6-8.I Write routinely over extended time frames (time for reflection and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.	Identify ways to improve a design solution. 3.4.5.D2 Use information provided in manuals, protocols, or by experienced people to see and understand how things work. 3.4.5.E3 Explain how tools, machines, products, and systems use energy in order to do work. S5.C.2.1 Describe basic energy types and sources, and how energy can be changed from one form to another. S5.C.2.1.1 Describe how energy exists in many forms (e.g., electrical, mechanical, chemical, heat, light, sound) and can be transformed within a system. S5.C.2.1.3 Distinguish between kinetic and potential energy. S5.A.1.1 Explain, interpret, and apply scientific, environmental, or technological knowledge presented in a variety of formats (visuals, scenarios, graphs). S5.A.1.1.2 Explain how observations and/or experimental results are used to support inferences and claims about an investigation or relationship (e.g., make a claim based on information on a graph).	M06.A-N.3.2.2 Interpret the absolute value of a rational number as its distance from 0 on the number line and as a magnitude for a positive or negative quantity in a real-world situation. Example: For an account balance of –30 dollars, write |–30| = 30 to describe the size of the debt in dollars, and recognize that an account balance less than –30 dollars represents a debt greater than 30 dollars. M06.A-N.3.2 Understand ordering and absolute value of rational numbers. M06.B-E.3.1.1 Write an equation to express the relationship between the dependent and independent variables. Example: In a problem involving motion at a constant speed of 65 units, write the equation d = 65t to represent the relationship between distance and time. M06.B-E.3.1 Use variables to represent two quantities in a real-world problem that change in relationship to one another.