Unpacked South Dakota State Mathematics Standards

Purpose: *In order for students to have the best chance of success, standards, assessment, curriculum resources, and instruction must be aligned in focus, coherence, and rigor. Unpacked standards documents are intended to help align instruction to the focus, coherence, and rigor of the South Dakota State Mathematics Standards. The standards have been organized in clusters as they are not so much built from topics, but rather woven out of progressions. Not all content in a given grade is emphasized equally in the mathematics standards. Some clusters require greater emphasis than others based on the depth of the ideas, the time that they take to master, and/or their importance to future mathematics or the demands of college and career readiness. To say that some things have greater emphasis is not to say that anything in the standards can safely be neglected in instruction. Neglecting standards will leave gaps in student skill and understanding and may leave students unprepared for the challenges of a later grade.*

Domain: Measurement and Data	Grade Level:

2.MD.C Cluster: Work with time and money. Learners tell and write time to the nearest five minutes. They also recognize and know the value of coins and bills, and apply that knowledge to solve word problems.

This is a SUPPORTING cluster. *Students should spend the large majority of their time (65-85%) on the major work of the grade.* ***Supporting* *work and, where appropriate, additional work should be connected to and engage students in the major work of the grade.*
 	
2.MD.7 Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.
 	
2.MD.8 Identify and count coins and bills and apply that understanding to solve word problems.
    a. Recognize and know the value of coins up to one dollar.
    b. Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using $ and ¢ symbols appropriately.

Aspects of Rigor for Student Learning: (Conceptual, Procedural, and/or Application)

Conceptual Understanding	*Procedural Fluency*	*Application*
Understand that a day is broken into two 12-hour cycles called a.m. and p.m. **(2.MD.7)** Relate analog and digital clocks **(2.MD.7)**	Tell and write the time using the colon notation **(2.MD.7)** Use skip counting by fives to tell time to the five minute intervals. **(2.MD.7)**	Relate telling time to everyday events in and out of school **(2.MD.7)**
	Recognize coins up to one dollar and their values **(2.MD.8)** Notate money amounts using $ and ¢ symbols **(2.MD.8)**	Solve word problems involving money **(2.MD.8)**

Enacting the Mathematical Practices - Evidence of Students Engaging in the Practices

1. **Make sense of problems and persevere in solving them.**
2. **Reason abstractly and quantitatively.**
3. **Construct viable arguments and critique the reasoning of others.**
4. **Model with mathematics.**
5. **Use appropriate tools strategically.**
   - Use an analog clock to represent and tell time.
   - Organize coins to count money more efficiently.

6. **Attend to precision.**
   - Accurately count money
   - Accurately tell time in 5 minute intervals
7. **Look for and make use of structure.**
8. **Look for and express regularity in repeated reasoning.**

Vertical and Horizontal Coherence and Learning Progressions

Previous Learning Connections	*Current Learning Connections*	*Future Learning Connections*
Learners tell time to the hour and half hour and connect analog and digital clocks (**1.MD.3**). Learners skip count by 5s and 10s to prepare for telling time and counting money. **(2.NBT.2)** Learners identify equivalent values for pennies, nickels and dimes (e.g., ten pennies can be thought of as one dime). Dimes and pennies are used as a place value model to help learners understand that ten ones is equal to one ten. **(1.MD.5)**	Learners apply their knowledge of one- and two-step word problems to a variety of contexts and domains, including money. **(2.OA.1) (2.NBT.5) (2.MD.5).**	Learners tell and write time to the nearest minute. **(3.MD.1)** Learners solve word problems using all four operations with measurement quantities. **(3.OA.3, 3.OA.8)**

Vocabulary (Key Terms Used by Teachers and Students in this Cluster):

- A.M.
- P.M.
- Analog Clock
- Digital Clock

Relevance, Explanations, and Examples:

Example task that meets various levels of rigor:

Carter saved $4.25 for school supplies. Here are the items he can buy:

Pencil	Eraser	Scissors	Glue sticks
$.37	$.75	$2.50	$1.25

  a. Choose two items he might buy. What is the total cost of these two items?
  b. Choose three items he might buy. What is the total cost of these three items? How much money will Carter have left after he buys these three items?
  c. How many glue sticks can Carter buy without going over $4.25? Write an equation and show your thinking.