

Topic 14 OVERVIEW

TOPIC FOCUS: Extending understanding of time and solving problems involving estimation and measurement of time intervals, liquid volume (capacity), and mass. Lessons include telling time to the nearest minute on an analog clock and using a counting up strategy to find elapsed time. They also include estimating liquid volume and mass as well as applying their understanding of fractions and number lines to read scales and container measurements.

ESSENTIAL QUESTION: How can time, capacity, and mass be measured and found?

STANDARDS: The Major focus standard for this topic are **3.MD.A.1, 3.MD.A.2** *Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.*

ASSESSMENT: **3.MD.A.1, 3.MD.A.2** standards are only assessed at the end of Topic 14, so the Topic 14 Assessment should be used summatively for those standards.

MANIPULATIVES: Blank clock faces (Teaching Tools 20) pan balance, [digital pan balance](#), marked liter beaker, bowls, gram and kilogram weights, etc.

REQUIRED ASSESSMENTS

Resources for Formative and Summative Assessment from enVision Mathematics

Pre-Assessment: Review What you Know

- Use item analysis to identify MDIS lessons

Topic 14 Review

- Online Topic 14 Assessment may be projected and used as a review.
- Topic 14 Performance Task (TE pg 579-580): can be used as guided instruction with the whole group, or independent/small group work. Not to be used as an assessment.

Topic 14 Assessment

- Topic 14 Assessment Practice(TE pg 575-578): Administer as a summative assessment for **3.MD.A.1** and **3.MD.A.2** (multiple items).

Pocatello/Chubbuck School District #25

3rd Grade

TOPIC 14: Solve Time, Capacity, and Mass Problems

Pacing: 11 Days

<p>STANDARDS</p> <p>The standards are clustered with Learning Intentions and Success Criteria (LI/SC) and are identified to provide coherence in teaching and learning.</p> <p>Students should spend the large majority of their time on the major work of the grade. Major clusters (□) address the most important standards at that grade level. Supporting clusters (△) are strongly connected to the content of the major clusters, and additional clusters (▢) address other content to be taught at that grade level.</p>	<p>TOPIC LEARNING INTENTIONS</p> <p>LI Identified on Math Background: Focus pg 529E</p>	<p>TOPIC SUCCESS CRITERIA</p> <p>SC identified in Topic Planner - math objectives 529A-529C</p>
<p>□ 3.MD.A.1 Tell and write time to the nearest minute within the same hour and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes.</p> <p>□ 3.MD.A.2 Identify and use the appropriate tools and units of measurement, both customary and metric, to solve one-step word problems using the four operations involving weight, mass, liquid volume, and capacity (within the same system and unit).</p>	<p>We are learning to extend our understanding of time and solving problems involving estimation and measurement of time intervals, liquid volume (capacity), and mass.</p>	<p>I can:</p> <p>14-1: Show and tell time to the minute using analog and digital clocks.</p> <p>14-2: Tell and write time to the nearest minute and measure time intervals in minutes.</p> <p>14-3: Solve word problems involving addition and subtraction to measure quantities of time.</p> <p>14-4: Use standard units to estimate liquid volume.</p> <p>14-5: Use standard units to measure liquid volume.</p> <p>14-6: Use standard units to estimate the masses of solid objects.</p> <p>14-7: Use a pan balance with metric weights to measure the mass of objects in grams and kilograms.</p> <p>14-8: Use pictures to help solve problems about mass and volume.</p> <p>14-9: Make sense of quantities and relationships in problems.</p>