**Hawaiian Values:**
AHONUI – persists with tasks
LAULIMA – helping others
PONO – open to learning

**Science Content Standards:**
Domain II, Strand 2 – Cycles of Matter
6. Students trace the cycling of matter and the flow of energy through systems of living things

<table>
<thead>
<tr>
<th>Learning Styles:</th>
<th>Unit: Realms of Ahupua’a</th>
<th>Term: 1</th>
<th>General Learner Outcomes:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Left Brain</td>
<td>Lesson Topic: REVIEW - WATER CYCLE &amp; MEASURING SCALE on a MAP</td>
<td></td>
<td>#2 Cooperates, helps &amp; encourages partner</td>
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<td>Visual</td>
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<td>Auditory</td>
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<td>Spatial</td>
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**Date:** M Tu W Th F ___________ **Time:** _______ to _______ (40 minutes)

**Objectives:** (1) students will read to learn/review the Water Cycle; (2) students will share their responses to the readings; (3) students will be introduced to Hawaiian words for land divisions; students will learn/review how to use a ruler to measure scale on a map

**Assessment/Performance Indicators:**
- Informal assessment: (1-2 points each) students’ participation in reading activity, positive partner measuring effort, persistence with tasks
- Formal assessment: (1-2 points each) student correctly answered 3 Scale questions

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<th>Points:</th>
<th>5</th>
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**Exceeds Expectations:** Participated fully, contributed to class discussion; scored 5/5 on Scale exercise

**Meets Expectations:** Participated in all activities; scored 3/5 or better on Scale exercise

**Needs Improvement:** Did not participate for 1/3rd of the lesson; scored 2/5 or less on Scale exercise

**Time:**
- 15 min.
- 5 min.
- 15 min.
- 5 min.

**Procedures to Teach Strategies, Skills, Content:**
- Opener: Silent Sustained Reading: *Hydrosphere – Water, Water Everywhere; The Water Cycle & The Water Cycle Poem*
- Discussion of Reading (group “talk story” or Think-Pair-Share activity)
- Direct instruction Measurement Activity: read *Hawaiian Land Divisions* hand-out; do 3 questions reviewing scale on a map (work with partner); teacher checks papers for understanding (or collects hand-outs if no time)
- Closure: Preview next 2 lessons this week – will do sit down hula (wear non-restrictive clothing next 2 classes) & learn about your local ‘ahupua’a

**Materials (see this folder for student hand-outs & teaching notes):**
- For teacher: copies of 1 reading & 1 worksheet for each student
- For students: rulers for each student

**Adaptations & Learning Extensions:**
- For reading levels (higher/lower): for grade 8/9 level readers use “Follow a Drip Through the Water Cycle” SSR
- For differentiated learning styles: auditory learners can try to memorize the Water Cycle Poem
- **Homework Option** students can measure & draw a room at home to scale of 1 inch = 10 ft

**Extensions to Other Disciplines/Standards:** Language Arts, Reading & Literature: 1. Students read a range of literary and informative texts for a variety of purposes; Mathematics, Measurement: 1. Students understand system of measurement and use techniques and tools for measuring; Social Studies, Geography: 5. Students demonstrate stewardship of Earth’s resources through the understanding of society and the physical environment.