

Social Studies — Monday: Designing Solutions for Modern Watersheds

Quarter 3 · Week 27: Quarter 3 Synthesis & Stewardship Action Plan

Name: _____ Date: _____ Day: _____

TODAY'S LESSON

Students map the migration patterns and water usage of the Anishinaabe people to understand historical stewardship of the St. Lawrence River.

1. Today's focus. In your own words, what is the main idea of today's lesson on "Designing Solutions for Modern Watersheds"?

2. Read carefully. Students map the migration patterns and water usage of the Anishinaabe people to understand historical stewardship of the St. Lawrence River. Underline two key terms above and define them below.

3. Think like a historian. What evidence would you look for to verify a claim made in today's lesson?

4. Connect. How does today's content connect to the bigger week theme of "Quarter 3 Synthesis & Stewardship Action Plan"?

5. Sketch & label. In the box, sketch one map, person, or artifact related to today's lesson and label three parts.

Name: _____ Date: _____ Day: _____

TODAY'S LESSON

Students calculate the total cubic volume of their classroom watershed models by applying the formula $V = l \times w \times h$ (5.MD.C.5).

1. **Warm-up.** Restate today's math objective in your own words: "Students calculate the total cubic volume of their classroom watershed models by applying the formula $V = l \times w \times h$ (5.MD.C.5)."

2. **Worked example.** Solve the example below carefully. Show every step.

3. **Practice.** Complete problems a–d. Label each answer with units where appropriate.

4. **Word problem.** Write and solve one word problem that uses today's skill.

5. **Reflect.** What was the trickiest step today, and what helped you push through it?

ELA — Monday: Designing Solutions for Modern Watersheds

Quarter 3 · Week 27: Quarter 3 Synthesis & Stewardship Action Plan

Name: _____ Date: _____ Day: _____

TODAY'S LESSON

Students finalize their citizen-action research reports by evaluating different points of view regarding Great Lakes conservation in 'The Death and Life of the Great Lakes' (RI.5.6).

1. Today's text/skill. Students finalize their citizen-action research reports by evaluating different points of view regarding Great Lakes conservation in 'The Death and Life of the Great Lakes' (RI.5.6).

2. Vocabulary. Choose two new words from today's text. Write each word, the sentence it appeared in, and your own definition.

3. Close reading. What is one piece of evidence from the text that supports today's main idea? Quote it exactly.

4. Your turn to write. In 5–7 sentences, respond to today's prompt. Use a clear topic sentence.

5. Self-check. Re-read your writing. Circle one strong sentence; underline one place you could improve.

Science — Monday: Designing Solutions for Modern Watersheds

Quarter 3 · Week 27: Quarter 3 Synthesis & Stewardship Action Plan

Name: _____ Date: _____ Day: _____

TODAY'S LESSON

Groups design a miniature filtration system using sand and gravel to demonstrate how human activities impact groundwater quality (5-ESS3-1).

1. Question. What scientific question does today's lesson investigate? "Groups design a miniature filtration system using sand and gravel to demonstrate how human activities impact groundwater quality (5-ESS3-1)."

2. Predict. Before doing the activity, what do you think will happen? Why?

3. Observe. Record what you actually saw, measured, or read. Use numbers and labeled drawings.

4. Explain. Use the day's vocabulary to explain WHY your observations make sense.

5. Cite the standard. What part of the NGSS performance expectation did today's work address?

Social Studies

Lesson: Students map the migration patterns and water usage of the Anishinaabe people to understand historical stewardship of the St. Lawrence River.

Sample answers / approach: Sample answer points: identify key people/places named, define 1-2 academic terms, give one cause and one effect.

Look-fors: Look for: accurate vocabulary, evidence cited from the lesson text, awareness of perspective.

Math

Lesson: Students calculate the total cubic volume of their classroom watershed models by applying the formula $V = l \times w \times h$ (5.MD.C.5).

Sample answers / approach: Sample answer pattern: clear setup, correct operation matching the standard, accurate computation, units labeled.

Look-fors: Look for: place-value alignment, regrouping shown, reasonableness check (estimate).

ELA

Lesson: Students finalize their citizen-action research reports by evaluating different points of view regarding Great Lakes conservation in 'The Death and Life of the Great Lakes' (RI.5.6).

Sample answers / approach: Sample answer: topic sentence restating the prompt, 2-3 details from the text with quotes, concluding sentence.

Look-fors: Look for: text evidence, accurate vocabulary, complete sentences, on-topic conclusion.

Science

Lesson: Groups design a miniature filtration system using sand and gravel to demonstrate how human activities impact groundwater quality (5-ESS3-1).

Sample answers / approach: Sample answer: clear claim, evidence from the investigation, reasoning that ties evidence to the standard.

Look-fors: Look for: prediction vs observation, units on measurements, vocabulary aligned with NGSS PE.

Social Studies — Tuesday: Tracing the Flow of Responsibility

Quarter 3 · Week 27: Quarter 3 Synthesis & Stewardship Action Plan

Name: _____ Date: _____ Day: _____

TODAY'S LESSON

Students research the impact of the 1909 Boundary Waters Treaty on US-Canada relations and cross-border environmental management.

1. Today's focus. In your own words, what is the main idea of today's lesson on "Tracing the Flow of Responsibility"?

2. Read carefully. Students research the impact of the 1909 Boundary Waters Treaty on US-Canada relations and cross-border environmental management. Underline two key terms above and define them below.

3. Think like a historian. What evidence would you look for to verify a claim made in today's lesson?

4. Connect. How does today's content connect to the bigger week theme of "Quarter 3 Synthesis & Stewardship Action Plan"?

5. Sketch & label. In the box, sketch one map, person, or artifact related to today's lesson and label three parts.

Quarter 3 · Week 27: Quarter 3 Synthesis & Stewardship Action Plan

Name: _____

Date: _____

Day: _____

TODAY'S LESSON

Students use visual fraction models to multiply the area of a simulated urban drainage plot by its runoff coefficient (5.NF.B.4).

1. Warm-up. Restate today's math objective in your own words: "Students use visual fraction models to multiply the area of a simulated urban drainage plot by its runoff coefficient (5.NF.B.4)."

2. Worked example. Solve the example below carefully. Show every step.

3. Practice. Complete problems a–d. Label each answer with units where appropriate.

4. Word problem. Write and solve one word problem that uses today's skill.

5. Reflect. What was the trickiest step today, and what helped you push through it?

ELA — Tuesday: Tracing the Flow of Responsibility

Quarter 3 · Week 27: Quarter 3 Synthesis & Stewardship Action Plan

Name: _____ Date: _____ Day: _____

TODAY'S LESSON

Partners peer-edit the 'Call to Action' sections of their reports to ensure a strong opinion is supported by logical reasoning and facts (W.5.1).

1. Today's text/skill. Partners peer-edit the 'Call to Action' sections of their reports to ensure a strong opinion is supported by logical reasoning and facts (W.5.1).

2. Vocabulary. Choose two new words from today's text. Write each word, the sentence it appeared in, and your own definition.

3. Close reading. What is one piece of evidence from the text that supports today's main idea? Quote it exactly.

4. Your turn to write. In 5–7 sentences, respond to today's prompt. Use a clear topic sentence.

5. Self-check. Re-read your writing. Circle one strong sentence; underline one place you could improve.

Science — Tuesday: Tracing the Flow of Responsibility

Quarter 3 · Week 27: Quarter 3 Synthesis & Stewardship Action Plan

Name: _____ Date: _____ Day: _____

TODAY'S LESSON

Students simulate agricultural runoff by adding food coloring to their watershed models and observing its movement into the main water body (5-ESS3-1).

1. Question. What scientific question does today's lesson investigate? "Students simulate agricultural runoff by adding food coloring to their watershed models and observing its movement into the main water body (5-ESS3-1)."

2. Predict. Before doing the activity, what do you think will happen? Why?

3. Observe. Record what you actually saw, measured, or read. Use numbers and labeled drawings.

4. Explain. Use the day's vocabulary to explain WHY your observations make sense.

5. Cite the standard. What part of the NGSS performance expectation did today's work address?

Answer Key & Teacher Notes — Tuesday

Quarter 3 · Week 27: Quarter 3 Synthesis & Stewardship Action Plan · Tracing the Flow of Responsibility

Social Studies

Lesson: Students research the impact of the 1909 Boundary Waters Treaty on US-Canada relations and cross-border environmental management.

Sample answers / approach: Sample answer points: identify key people/places named, define 1-2 academic terms, give one cause and one effect.

Look-fors: Look for: accurate vocabulary, evidence cited from the lesson text, awareness of perspective.

Math

Lesson: Students use visual fraction models to multiply the area of a simulated urban drainage plot by its runoff coefficient (5.NF.B.4).

Sample answers / approach: Sample answer pattern: clear setup, correct operation matching the standard, accurate computation, units labeled.

Look-fors: Look for: place-value alignment, regrouping shown, reasonableness check (estimate).

ELA

Lesson: Partners peer-edit the 'Call to Action' sections of their reports to ensure a strong opinion is supported by logical reasoning and facts (W.5.1).

Sample answers / approach: Sample answer: topic sentence restating the prompt, 2-3 details from the text with quotes, concluding sentence.

Look-fors: Look for: text evidence, accurate vocabulary, complete sentences, on-topic conclusion.

Science

Lesson: Students simulate agricultural runoff by adding food coloring to their watershed models and observing its movement into the main water body (5-ESS3-1).

Sample answers / approach: Sample answer: clear claim, evidence from the investigation, reasoning that ties evidence to the standard.

Look-fors: Look for: prediction vs observation, units on measurements, vocabulary aligned with NGSS PE.

Social Studies — Wednesday: Evidence and Action Research Synthesis

Quarter 3 · Week 27: Quarter 3 Synthesis & Stewardship Action Plan

Name: _____ Date: _____ Day: _____

TODAY'S LESSON

Students analyze the current role of the International Joint Commission in balancing the economic and ecological needs of the Great Lakes region.

1. Today's focus. In your own words, what is the main idea of today's lesson on "Evidence and Action Research Synthesis"?

2. Read carefully. Students analyze the current role of the International Joint Commission in balancing the economic and ecological needs of the Great Lakes region. Underline two key terms above and define them below.

3. Think like a historian. What evidence would you look for to verify a claim made in today's lesson?

4. Connect. How does today's content connect to the bigger week theme of "Quarter 3 Synthesis & Stewardship Action Plan"?

5. Sketch & label. In the box, sketch one map, person, or artifact related to today's lesson and label three parts.

Name: Date: Day:

TODAY'S LESSON
Students divide unit fractions of gallons of 'polluted' water by whole numbers to determine the chemical concentration per student observation station (5.NF.B.7).

1. Warm-up. Restate today's math objective in your own words: "Students divide unit fractions of gallons of 'polluted' water by whole numbers to determine the chemical concentration per student observation station (5.NF.B.7)."

Three horizontal lines for writing the warm-up response.

2. Worked example. Solve the example below carefully. Show every step.

A 3x20 grid for working on the example problem.

3. Practice. Complete problems a–d. Label each answer with units where appropriate.

A 3x20 grid for practicing problems.

4. Word problem. Write and solve one word problem that uses today's skill.

A 3x20 grid for writing and solving a word problem.

5. Reflect. What was the trickiest step today, and what helped you push through it?

Three horizontal lines for reflecting on the lesson.

Name: _____ Date: _____ Day: _____

TODAY'S LESSON

Students conduct a final short research session to gather secondary sources supporting their proposed solutions for local soil erosion (W.5.7).

1. Today's text/skill. Students conduct a final short research session to gather secondary sources supporting their proposed solutions for local soil erosion (W.5.7).

2. Vocabulary. Choose two new words from today's text. Write each word, the sentence it appeared in, and your own definition.

3. Close reading. What is one piece of evidence from the text that supports today's main idea? Quote it exactly.

4. Your turn to write. In 5–7 sentences, respond to today's prompt. Use a clear topic sentence.

5. Self-check. Re-read your writing. Circle one strong sentence; underline one place you could improve.

Name: _____ Date: _____ Day: _____

TODAY'S LESSON

Students document how individual communities can protect Earth's resources by testing the effectiveness of bioswales in their landscape models (5-ESS3-1).

1. Question. What scientific question does today's lesson investigate? "Students document how individual communities can protect Earth's resources by testing the effectiveness of bioswales in their landscape models (5-ESS3-1)."

2. Predict. Before doing the activity, what do you think will happen? Why?

3. Observe. Record what you actually saw, measured, or read. Use numbers and labeled drawings.

4. Explain. Use the day's vocabulary to explain WHY your observations make sense.

5. Cite the standard. What part of the NGSS performance expectation did today's work address?

Social Studies

Lesson: Students analyze the current role of the International Joint Commission in balancing the economic and ecological needs of the Great Lakes region.

Sample answers / approach: Sample answer points: identify key people/places named, define 1-2 academic terms, give one cause and one effect.

Look-fors: Look for: accurate vocabulary, evidence cited from the lesson text, awareness of perspective.

Math

Lesson: Students divide unit fractions of gallons of 'polluted' water by whole numbers to determine the chemical concentration per student observation station (5.NF.B.7).

Sample answers / approach: Sample answer pattern: clear setup, correct operation matching the standard, accurate computation, units labeled.

Look-fors: Look for: place-value alignment, regrouping shown, reasonableness check (estimate).

ELA

Lesson: Students conduct a final short research session to gather secondary sources supporting their proposed solutions for local soil erosion (W.5.7).

Sample answers / approach: Sample answer: topic sentence restating the prompt, 2-3 details from the text with quotes, concluding sentence.

Look-fors: Look for: text evidence, accurate vocabulary, complete sentences, on-topic conclusion.

Science

Lesson: Students document how individual communities can protect Earth's resources by testing the effectiveness of bioswales in their landscape models (5-ESS3-1).

Sample answers / approach: Sample answer: clear claim, evidence from the investigation, reasoning that ties evidence to the standard.

Look-fors: Look for: prediction vs observation, units on measurements, vocabulary aligned with NGSS PE.

Social Studies — Thursday: Communicating Conservation and Community Impact

Quarter 3 · Week 27: Quarter 3 Synthesis & Stewardship Action Plan

Name: _____ Date: _____ Day: _____

TODAY'S LESSON

Students participate in a mock town hall to debate the ethical implications of industrial water diversion in the American West.

1. Today's focus. In your own words, what is the main idea of today's lesson on "Communicating Conservation and Community Impact"?

2. Read carefully. Students participate in a mock town hall to debate the ethical implications of industrial water diversion in the American West. Underline two key terms above and define them below.

3. Think like a historian. What evidence would you look for to verify a claim made in today's lesson?

4. Connect. How does today's content connect to the bigger week theme of "Quarter 3 Synthesis & Stewardship Action Plan"?

5. Sketch & label. In the box, sketch one map, person, or artifact related to today's lesson and label three parts.

Quarter 3 · Week 27: Quarter 3 Synthesis & Stewardship Action Plan

Name: _____

Date: _____

Day: _____

TODAY'S LESSON

Students solve real-world problems involving the volume of rectangular water storage tanks used in sustainable urban irrigation (5.MD.C.5).

1. Warm-up. Restate today's math objective in your own words: "Students solve real-world problems involving the volume of rectangular water storage tanks used in sustainable urban irrigation (5.MD.C.5)."

2. Worked example. Solve the example below carefully. Show every step.

3. Practice. Complete problems a–d. Label each answer with units where appropriate.

4. Word problem. Write and solve one word problem that uses today's skill.

5. Reflect. What was the trickiest step today, and what helped you push through it?

ELA — Thursday: Communicating Conservation and Community Impact

Quarter 3 · Week 27: Quarter 3 Synthesis & Stewardship Action Plan

Name: _____ Date: _____ Day: _____

TODAY'S LESSON

Students prepare digital slide decks that synthesize their research findings on watershed health using academic vocabulary from the Quarter 3 unit.

1. Today's text/skill. Students prepare digital slide decks that synthesize their research findings on watershed health using academic vocabulary from the Quarter 3 unit.

2. Vocabulary. Choose two new words from today's text. Write each word, the sentence it appeared in, and your own definition.

3. Close reading. What is one piece of evidence from the text that supports today's main idea? Quote it exactly.

4. Your turn to write. In 5–7 sentences, respond to today's prompt. Use a clear topic sentence.

5. Self-check. Re-read your writing. Circle one strong sentence; underline one place you could improve.

Name: _____ Date: _____ Day: _____

TODAY'S LESSON

Groups record a time-lapse video of water movement through their models to explain how human-made barriers change natural drainage patterns (5-ESS3-1).

1. Question. What scientific question does today's lesson investigate? "Groups record a time-lapse video of water movement through their models to explain how human-made barriers change natural drainage patterns (5-ESS3-1)."

2. Predict. Before doing the activity, what do you think will happen? Why?

3. Observe. Record what you actually saw, measured, or read. Use numbers and labeled drawings.

4. Explain. Use the day's vocabulary to explain WHY your observations make sense.

5. Cite the standard. What part of the NGSS performance expectation did today's work address?

Answer Key & Teacher Notes — Thursday

Quarter 3 · Week 27: Quarter 3 Synthesis & Stewardship Action Plan · Communicating Conservation and Community Impact

Social Studies

Lesson: Students participate in a mock town hall to debate the ethical implications of industrial water diversion in the American West.

Sample answers / approach: Sample answer points: identify key people/places named, define 1-2 academic terms, give one cause and one effect.

Look-fors: Look for: accurate vocabulary, evidence cited from the lesson text, awareness of perspective.

Math

Lesson: Students solve real-world problems involving the volume of rectangular water storage tanks used in sustainable urban irrigation (5.MD.C.5).

Sample answers / approach: Sample answer pattern: clear setup, correct operation matching the standard, accurate computation, units labeled.

Look-fors: Look for: place-value alignment, regrouping shown, reasonableness check (estimate).

ELA

Lesson: Students prepare digital slide decks that synthesize their research findings on watershed health using academic vocabulary from the Quarter 3 unit.

Sample answers / approach: Sample answer: topic sentence restating the prompt, 2-3 details from the text with quotes, concluding sentence.

Look-fors: Look for: text evidence, accurate vocabulary, complete sentences, on-topic conclusion.

Science

Lesson: Groups record a time-lapse video of water movement through their models to explain how human-made barriers change natural drainage patterns (5-ESS3-1).

Sample answers / approach: Sample answer: clear claim, evidence from the investigation, reasoning that ties evidence to the standard.

Look-fors: Look for: prediction vs observation, units on measurements, vocabulary aligned with NGSS PE.

Social Studies — Friday: The Citizen-Action Stewardship Showcase

Quarter 3 · Week 27: Quarter 3 Synthesis & Stewardship Action Plan

Name: _____ Date: _____ Day: _____

TODAY'S LESSON

Students compile their Quarter 3 portfolios, including their final action plans and a map of indigenous territories within the Mackenzie River Basin.

1. Today's focus. In your own words, what is the main idea of today's lesson on "The Citizen-Action Stewardship Showcase"?

2. Read carefully. Students compile their Quarter 3 portfolios, including their final action plans and a map of indigenous territories within the Mackenzie River Basin. Underline two key terms above and define them below.

3. Think like a historian. What evidence would you look for to verify a claim made in today's lesson?

4. Connect. How does today's content connect to the bigger week theme of "Quarter 3 Synthesis & Stewardship Action Plan"?

5. Sketch & label. In the box, sketch one map, person, or artifact related to today's lesson and label three parts.

Quarter 3 · Week 27: Quarter 3 Synthesis & Stewardship Action Plan

Name: _____

Date: _____

Day: _____

TODAY'S LESSON

Students complete a cumulative math assessment requiring them to multiply fractions and calculate volumes within the context of hydrological data (5.NF.B.4, 5.MD.C.5).

1. Warm-up. Restate today's math objective in your own words: "Students complete a cumulative math assessment requiring them to multiply fractions and calculate volumes within the context of hydrological data (5.NF.B.4, 5.MD.C.5)."

2. Worked example. Solve the example below carefully. Show every step.

3. Practice. Complete problems a–d. Label each answer with units where appropriate.

4. Word problem. Write and solve one word problem that uses today's skill.

5. Reflect. What was the trickiest step today, and what helped you push through it?

ELA — Friday: The Citizen-Action Stewardship Showcase

Quarter 3 · Week 27: Quarter 3 Synthesis & Stewardship Action Plan

Name: _____ Date: _____ Day: _____

TODAY'S LESSON

Students deliver their citizen-action research presentations to an audience of peers and provide constructive feedback on the clarity of each speaker's perspective (RI.5.6).

1. Today's text/skill. Students deliver their citizen-action research presentations to an audience of peers and provide constructive feedback on the clarity of each speaker's perspective (RI.5.6).

2. Vocabulary. Choose two new words from today's text. Write each word, the sentence it appeared in, and your own definition.

3. Close reading. What is one piece of evidence from the text that supports today's main idea? Quote it exactly.

4. Your turn to write. In 5–7 sentences, respond to today's prompt. Use a clear topic sentence.

5. Self-check. Re-read your writing. Circle one strong sentence; underline one place you could improve.

Science — Friday: The Citizen-Action Stewardship Showcase

Quarter 3 · Week 27: Quarter 3 Synthesis & Stewardship Action Plan

Name: _____ Date: _____ Day: _____

TODAY'S LESSON

Students present their finished watershed models and explain how their specific engineering solutions mitigate human impact on the ecosystem (5-ESS3-1).

1. Question. What scientific question does today's lesson investigate? "Students present their finished watershed models and explain how their specific engineering solutions mitigate human impact on the ecosystem (5-ESS3-1)."

2. Predict. Before doing the activity, what do you think will happen? Why?

3. Observe. Record what you actually saw, measured, or read. Use numbers and labeled drawings.

4. Explain. Use the day's vocabulary to explain WHY your observations make sense.

5. Cite the standard. What part of the NGSS performance expectation did today's work address?

Social Studies

Lesson: Students compile their Quarter 3 portfolios, including their final action plans and a map of indigenous territories within the Mackenzie River Basin.

Sample answers / approach: Sample answer points: identify key people/places named, define 1-2 academic terms, give one cause and one effect.

Look-fors: Look for: accurate vocabulary, evidence cited from the lesson text, awareness of perspective.

Math

Lesson: Students complete a cumulative math assessment requiring them to multiply fractions and calculate volumes within the context of hydrological data (5.NF.B.4, 5.MD.C.5).

Sample answers / approach: Sample answer pattern: clear setup, correct operation matching the standard, accurate computation, units labeled.

Look-fors: Look for: place-value alignment, regrouping shown, reasonableness check (estimate).

ELA

Lesson: Students deliver their citizen-action research presentations to an audience of peers and provide constructive feedback on the clarity of each speaker's perspective (RI.5.6).

Sample answers / approach: Sample answer: topic sentence restating the prompt, 2-3 details from the text with quotes, concluding sentence.

Look-fors: Look for: text evidence, accurate vocabulary, complete sentences, on-topic conclusion.

Science

Lesson: Students present their finished watershed models and explain how their specific engineering solutions mitigate human impact on the ecosystem (5-ESS3-1).

Sample answers / approach: Sample answer: clear claim, evidence from the investigation, reasoning that ties evidence to the standard.

Look-fors: Look for: prediction vs observation, units on measurements, vocabulary aligned with NGSS PE.