

Grade 4: Module 3A: Unit 3: Overview



This work is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 3.0 Unported License. Exempt third-party content is indicated by the footer: © (name of copyright holder). Used by permission and not subject to Creative Commons license.



Culminating Project: Sharing Opinions: The Most Helpful Simple Machine

Unit 3: Culminating Project: Sharing Opinions: The Most Helpful Simple Machine

In this unit students will use their research on simple machines to form an opinion and write an editorial. This editorial will state the student's opinion on which simple machine he or she believes helps people the most. Students will read and analyze two editorials as mentor texts in order to study author's craft, specifically how to identify opinions in writing and how authors use reasons with evidence to support their opinions. Students will then plan for their editorials by revisiting their

notes in their Simple Machine science journals and the central text *Simple Machines: Forces in Action* by Buffy Silverman to develop reasons for their opinions and gather evidence to support these reasons. Students will then draft their editorials and revise their work based on a series of lessons in which students examine the characteristics of opinion writing.

Guiding Questions And Big Ideas

- How do simple machines affect our lives?
- How do readers and writers form and support opinions?
- Simple machines affect force, effort, and work.



Culminating Project: Sharing Opinions: The Most Helpful Simple Machine

Mid-Unit 3 Assessment	Reading and Answering Questions about Editorials This assessment centers on standards NYSP12 ELA CCLS RI.4.8 and RI.4.4. Learning targets are: "I can explain how an author uses reasons and evidence to support particular points in a text," and "I can determine the meaning of academic words or phrases in an informational text." Students will read and answer questions about an opinion piece—an editorial—with a particular focus on author's craft. They will then answer text-dependent multiple choice and short answer questions.
End of Unit 3 Assessment	(Part I) Planning and Drafting an Editorial (Part II) Revising to Create a Polished Editorial This two-part assessment centers on standard NYSP12 ELA CCLS W.4.1: "I can write an opinion piece that supports a point of view with reasons and information." In this on-demand assessment, students will select another simple machine (different from that on their performance task) to write an editorial about why this new simple machine could be the most helpful in daily life. In Part I, students will select their new simple machine and plan for their writing by rereading the text <i>Simple Machines: Forces in Action</i> by Buffy Silverman and revisiting notes in their Simple Machines science journals to develop reasons for their opinion and gather evidence to support these reasons. Then they will complete a draft of their editorial. In Part II, students will revise to create a polished editorial based on the Simple Machine Editorial rubric created in this module.



Culminating Project: Sharing Opinions: The Most Helpful Simple Machine

Content Connections

This module is designed to address English Language Arts standards. However, the module intentionally incorporates Science content that many teachers may be teaching during other parts of the day. These intentional connections are described below.

NYS Science Core Curriculum

- Science Learning Standard 4: The Physical Setting
 - Students will understand and apply scientific concepts, principles, and theories pertaining to the physical setting and living environment and recognize the historical development of ideas in science.
- Key Idea 5
 - Energy and matter interact through forces that result in changes in motion.

Central Texts

- 1. Buffy Silverman, Simple Machines: Forces in Action, Do It Yourself series (New York: Heinemann, 2009); ISBN: 978-1-4329-2317-4
- 2. Expeditionary Learning, "No More Junk in Our Schools," written for instructional purposes.
- 3. Expeditionary Learning, "Who Cares about Polar Bears?" written for instructional purposes.



Calendared Curriculum Map:

Unit-at-a-Glance

This unit is approximately 3-4 weeks or 17-19 sessions of instruction.

Lesson	Lesson Title	Long-Term Targets	Supporting Targets	Ongoing Assessment	Anchor Charts & Protocols
Lesson 1	Reading Editorials, Part I: Determining Authors' Opinions	 I can write an editorial stating my opinion about which simple machine benefits people the most in their everyday lives. (W.4.1) I can explain how an author uses reasons and evidence to support particular points in a text. (RI.4.8) 	 I can determine an author's opinion in a text. I can write a gist statement about an editorial. I can form an opinion about simple machines for my editorial. 	• Exploring Opinions as Readers and Writers anchor chart (added notes)	 Exploring Opinions as Readers and Writers anchor chart (from Unit 1, Lesson 4) Simple Machines Chalk Talk charts Chalk Talk protocol
Lesson 2	Reading Editorials, Part II: How Authors Support Their Opinions with Reasons and Evidence	 I can explain how an author uses reasons and evidence to support particular points in a text. (RI.4.8) I can write an opinion piece that supports a point of view with reasons and information. (W.4.1) 	 I can write a gist statement about an editorial. I can determine an author's opinion in an editorial. I can explain how authors support their opinions with reasons and evidence. 	 Exploring Opinions as Readers and Writers anchor chart Reading and Analyzing an Editorial graphic organizer 	• Exploring Opinions as Readers and Writers (added to)
Lesson 3	Reading as Writers: Identifying Characteristics of Editorials	 I can explain how an author uses reasons and evidence to support particular points in a text. (RI.4.8) I can write an opinion piece that supports a point of view with reasons and information. (W.4.1) 	• I can explain how authors support their opinions with reasons and evidence.	• Entrance/exit ticket	 Exploring Opinions as Readers and Writers (Added to) Back-to-Back and Face-to- Face protocol



Calendared Curriculum Map:

Lesson	Lesson Title	Long-Term Targets	Supporting Targets	Ongoing Assessment	Anchor Charts & Protocols
Lesson 4*	Mid-Unit Assessment: Reading and Answering Questions about Editorials	 I can determine the meaning of academic words or phrases in an informational text. (RI.4.4) I can explain how an author uses reasons and evidence to support particular points in a text. (RI.4.8) 	• I can explain how an author uses reasons and evidence to support an opinion.	 Mid-Unit 3 Assessment: Reading and Answering Questions about Editorials Tracking My Progress, Mid- Unit 3 recording form 	Concentric Circles
Lesson 5	Preparing to Write: Identifying Characteristics of Editorials and Determining Reasons to Support Our Opinions about Simple Machines	 I can write an opinion piece that supports a point of view with reasons and information. (W.4.1) I can recall information that is important to a topic. (W.4.8) I can sort my notes into categories. (W.4.8) I can effectively engage in discussions with diverse partners about fourth- grade topics and texts. (SL.4.1) 	 I can identify the characteristics of an editorial. I can create reasons for my opinion on simple machines based on scientific text, my notes, and my observations. I can identify which reasons are supported by the text and which are supported by my observations. I can effectively collaborate with my Simple Machine Expert Group. 	Simple Machine Opinion charts (one for each simple machine studied: wedge [for modeling], inclined plane, lever, pulley, and wheel)	 Editorial Characteristics and Planning chart Simple Machine T-charts Exploring Opinions as Readers and Writers anchor chart (added to in Lesson 3)
Lesson 6	Planning to Write Editorials: Grouping Reasons with Evidence That Supports My Opinion	 I can write an opinion piece that supports a point of view with reasons and information. (W.4.1) I can recall information that is important to a topic. (W.4.8) I can sort my notes into categories. (W.4.8) 	 I can use scientifically accurate reasons and evidence to support my opinion about a simple machine. I can group together reasons with related evidence in my editorial. 	 Simple Machine Editorial graphic organizer Simple Machines Editorial rubric 	 Simple Machine Editorial rubric chart Exploring Opinions as Readers and Writers anchor chart (from Lesson 3) Editorial Characteristics and Planning chart (from Lesson 5) Simple Machine T-charts Mix and Mingle protocol



Calendared Curriculum Map:

Lesson	Lesson Title	Long-Term Targets	Supporting Targets	Ongoing Assessment	Anchor Charts & Protocols
Lesson 7	Drafting an Editorial about a Simple Machine	 I can write an opinion piece that supports a point of view with reasons and information. (W.4.1) a. I can group together reasons with related evidence in my editorial. b. I can use scientifically accurate reasons and evidence to support my opinion about a simple machine. I can use the writing process to produce clear and coherent writing (with support). (W.4.5) I can effectively participate in a conversation with my peers and adults. (SL.4.1) 	 I can write an editorial stating my opinion on which simple machine benefits people the most in their everyday lives. I can use scientifically accurate reasons and evidence to support my opinion about a simple machine. I can group together reasons with related evidence in my editorial. I can give kind, helpful, and specific feedback to my critique partner. 	 Simple Machine Editorial graphic organizers Drafts of Simple Machine Editorials 	 Critique Protocol anchor chart Editorial Characteristics and Planning chart (review) Simple Machines rubric anchor chart Peer Critique protocol
Lesson 8	Revising for Ideas: Interesting Introductions	 I can write an opinion piece that supports a point of view with reasons and information. (W.4.1) I can use the writing process to produce clear and coherent writing (with support). (W.4.5) I can effectively engage in discussions with diverse partners about fourth-grade topics and texts. (SL.4.1) 	 I can write an introduction in my editorial that explains simple machines and states my opinion clearly. I can give kind and helpful feedback to my writing partner. 	List of Introductions	 Interesting Introductions Bold Beginnings (review from Module 2, Unit 3, Lesson 12) Simple Machines Editorial rubric chart (added to)



Calendared Curriculum Map:

Lesson	Lesson Title	Long-Term Targets	Supporting Targets	Ongoing Assessment	Anchor Charts & Protocols
Lesson 9	Revising for Word Choice: Scientifically Accurate Vocabulary	 I can express ideas using carefully chosen words. (L.4.3) I can write an opinion piece that supports a point of view with reasons and information. (W.4.1) I can use the writing process to produce clear and coherent writing (with support). (W.4.5) 	I can use vocabulary from my research on simple machines to write scientifically accurate descriptions in my editorial.	 List of key vocabulary words Revised draft Exit ticket 	• Simple Machines Editorial rubric chart (added to)
Lesson 10	Peer Critique: Scientific Accuracy of Ideas and Vocabulary	 I can write an opinion piece that supports a point of view with reasons and information. (W.4.1) I can use the writing process to produce clear and coherent writing (with support). (W.4.5) I can effectively engage in discussions with diverse partners about fourth-grade topics and texts. (SL.4.1) 	 I can give kind, helpful, and specific feedback to my writing partner. I can critique the ideas of my writing partner's editorial for scientific accuracy. 	• Feedback and reflection notes	 Steps for Revising My Editorial anchor chart Critique Protocol anchor chart (review) Simple Machine Editorial Rubric chart (review) Peer Critique protocol
Lesson 11	Revising for Organization: Catchy Conclusions	 I can write an opinion piece that supports a point of view with reasons and information. (W.4.1) I can use the writing process to produce clear and coherent writing (with support). (W.4.5) I can effectively engage in discussions with diverse partners about fourth-grade topics and texts. (SL.4.1) 	 I can develop a conclusion that summarizes my point of view about simple machines in my editorial. I can give specific, kind, and helpful feedback to my writing partner. 	List of conclusions	• Peer Critique Norms (review from Module 2, Unit 3)



Calendared Curriculum Map:

Lesson	Lesson Title	Long-Term Targets	Supporting Targets	Ongoing Assessment	Anchor Charts & Protocols
Lesson 12	Revising for Sentence Fluency: Compound Sentences	 I can use conventions to send a clear message to my reader. (L.4.2) I can write an opinion piece that supports a point of view with reasons and information. (W.4.1) I can use the writing process to produce clear and coherent writing (with support). (W.4.5) I can effectively engage in discussions with diverse partners about fourth-grade topics and texts. (SL.4.1) 	 I can write sentences that link thoughts together with conjunctions to explain reasons that support my opinion. I can give kind and helpful feedback to my writing partner. 	• Revised drafts	 Compound Sentences Simple Machines Editorial rubric chart (added to)
Lesson 13	Reviewing Conventions and Editing Peers' Editorials	 I can write an opinion piece that supports a point of view with reasons and information. (W.4.1) I can use the writing process to produce clear and coherent writing (with support). (W.4.5) I can use conventions to send a clear message to my reader. (L.4.1, L.4.2, L.4.3) 	 I can check my peers' work for correct capitalization. I can check my peers' work for correct spelling. I can check my peers' work for correct punctuation at the end of sentences. I can check my peers' work for complete sentences. 	 Conventions anchor charts Simple Machine Editorials (second drafts annotated for edits) Exit tickets 	 Simple Machines rubric anchor chart (added to) Chalk Talk protocol



Calendared Curriculum Map:

Lesson	Lesson Title	Long-Term Targets	Supporting Targets	Ongoing Assessment	Anchor Charts & Protocols
Lesson 14	Publishing Simple Machine Editorials	 I can write an opinion piece that supports a point of view with reasons and information. (W4.1) I can use grammar conventions to send a clear message to a reader or listener. (L.4.1, L.4.2) With support, I can use technology to publish a piece of writing. (W.4.6) 	 I can write an editorial stating my opinion on which simple machine benefits people the most in their everyday lives. I can correct conventions based on editing notes in my editorial and online reference resources. I can publish a typed version of my simple machine editorial. 	• Simple Machine Editorial (final copy)	 Steps for Publishing My Editorial chart Simple Machines rubric anchor chart (reviewed)
Lesson 15	End of Unit Assessment Part I: Planning and Drafting an Editorial	 I can write an opinion piece that supports a point of view with reasons and information. (W.4.1) I can produce writing that is appropriate to task, purpose, and audience. (W.4.4) 	 I can write an editorial stating my opinion on which simple machine benefits people the most in their everyday lives. I can plan, draft, and revise an editorial in the course of two lessons. 	• End of Unit 3 Assessment Part I: Planning and Drafting an Editorial	
Lesson 16	End of Unit Assessment Part II: Revising to Create a Polished Editorial and Author's Chair Celebration	 I can write an opinion piece that supports a point of view with reasons and information. (W.4.1) I can produce writing that is appropriate to task, purpose, and audience. (W.4.4) I can effectively engage in discussions with diverse partners about fourth-grade topics and texts. (SL.4.1) 	 I can write an editorial stating my opinion on which simple machine benefits people the most in their everyday lives. I can plan, draft, and revise an editorial in the course of two lessons. I can listen as my peers share their writing and give specific praise for their work. 	 End of Unit 3 Assessment Part II: Revising to Create a Polished Editorial Tracking My Progress, End of Unit 3 recording form 	• Author's Chair Celebration



Culminating Project: Sharing Opinions: The Most Helpful Simple Machine

Optional: Experts, Fieldwork, And Service

Experts:

• Ask an editor of a local newspaper or magazine to talk with the students about how editorials fit in their publication. Invite a local newspaper journalist to speak to students about how editorials are written.

Fieldwork:

• Visit the local offices of the local newspaper and get a tour of the facilities to track how articles go from drafting to publication.

Service:

• N/A

Optional: Extensions

• Create a simple machines magazine with articles on how they work and how to use them. Ask the art teacher to help students craft diagrams of their simple machines to add to the articles.

Preparation and Materials

• As in previous modules, students revise their work using different-colored pencils for each focus. This begins in Lesson 8. Students will need the following colors: red, orange, green, blue, purple.