*Force and Simple Machines*

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| **Step 1: Learning Targets and Success Criteria** | | | | | | |
| **Learning Targets**  **Writing Standard 1:** Write opinion pieces on topics or texts, supporting a point of view with reasons.  **Science Standard 3 Objective 1c:** Investigate how forces applied through simple machines affect the direction and/or amount of resulting force. | | **Transfer** | | | | |
| Students will be able to independently use their learning to use text to support their opinions in writing. | | | | |
| **Success Criteria** | | | | |
| Students will write an opinion piece giving reasons to support point of view using evidence from texts.  Students will evaluate six simple machines to make conclusions and apply knowledge to real world situations. | | | | |
| **Step 2: Context** | | | | | | |
| **Text Set** | | | | | | |
| Title: “Meet the Machine” | | | | Description: An overview of the six simple machines with kid friendly graphics and characters. These characters present the information in an engaging manner using speech balloons.  Website: [Meet the Machine](http://go.galegroup.com/ps/retrieve.do?sgHitCountType=None&sort=CL_SORT&docType=Brief+article&prodId=ITKE&tabID=T003&searchId=R6&resultListType=RESULT_LIST&searchType=TopicSearchForm&contentSegment=&currentPosition=33&searchResultsType=SingleTab&inPS=true&userGroupName=pioneer&docId=GALE%7CA249879479&contentSet=GALE%7CA249879479) (Access through Pioneer Library Infobits) | | |
| Lexile: 670 | | | |
| Qualitative Features: Specific content vocabulary and some complex sentence structure. | | | |
| Title: “Simple Machines” | | | | Description: An overview of the six simple machines. It includes examples of how each simple machine can be used.  Website: [Simple Machines](http://go.galegroup.com/ps/retrieve.do?sgHitCountType=None&sort=RELEVANCE-SORT&docType=Topic+overview&prodId=ITKE&tabID=T001&searchId=R4&resultListType=RESULT_LIST&searchType=TopicSearchForm&contentSegment=&currentPosition=1&searchResultsType=MultiTab&inPS=true&userGroupName=pioneer&docId=GALE%7CETBQFJ525712552&contentSet=GALE%7CETBQFJ525712552) (Access through Pioneer Library Infobits) | | |
| Lexile: 860 | | | |
| Qualitative Features: Subject specific vocabulary, provides concrete examples, and some complex sentence structure. | | | |
| Title: “[Machine](http://www.worldbookonline.com/kids/home#article/ar831096)” | | | | Description: An overview of the six simple machines. It includes examples of how each simple machine can be used.  Website: [Machine](http://www.worldbookonline.com/kids/home#article/ar831096) | | |
| Lexile: 820 | | | |
| Qualitative Features: Subject specific vocabulary, concrete examples, and some complex sentence structure. | | | |
| Title: “May The Force Be With You” | | | | Description: This is an introduction of what force is. It also explains how simple machines help us do the same amount of work with less effort.  Website: [May the Force Be With You](http://www.uen.org/core/science/sciber/TRB3/downloads/literacy3.pdf) | | |
| Lexile: 610 | | | |
| Qualitative Features: content vocabulary, includes a mix of simple and more complicated, abstract ideas. | | | |
| Title: “Simple Machine” (Video) | | | | Description: A short video that gives a basic explanation of the six simple machines.  Website: [Simple Machine Video](http://idahoptv.org/sciencetrek/topics/simple_machines/index.cfm?id=3) | | |
| Lexile: NA | | | |
| Qualitative Features: familiar language, clear meaning, and includes simple concrete ideas. | | | |
| Title: “What is a Simple Machine?” | | | | Description: Explanation of how simple machines work including pictures and definitions.  Website: [What is a Simple Machine?](http://web.a.ebscohost.com/ehost/pdfviewer/pdfviewer?sid=567679fb-c6b6-4f79-b4a5-95ff4eb71689%40sessionmgr4003&vid=15&hid=4101) (Access through Pioneer Library EBSCO) | | |
| Lexile: 620 | | | |
| Qualitative Features: Specific content vocabulary, pictures to enhance understanding. | | | |
| Title: “How Do Simple Machines Work?”  Lexile: 840  Qualitative Features: content vocabulary, text features to enhance meaning, | | | | Description: Explanation of how simple machines work including pictures and graphics with definitions.  Website: [How Do Simple Machines Work?](http://web.a.ebscohost.com/ehost/pdfviewer/pdfviewer?sid=567679fb-c6b6-4f79-b4a5-95ff4eb71689%40sessionmgr4003&vid=11&hid=4101) (Access through Pioneer Library EBSCO) | | |
| **Step 3: Performance Task** | | | | | | |
| Performance Task | | | | | | |
| Suppose your grandmother is moving from her apartment and needs your help. Watch the video “Simple Machines” and read the texts “May the Force Be With You” and “How Do Simple Machines Work?” Use the information you gain to write an opinion piece that states which machine you would use to help. Be sure to include evidence from the texts to support your choice. | | | | | | |
| **Step 4: Scoring Guide** | | | | | | |
| Scoring Guide | | | | | | |
| Performance Criteria | 4  Highly Proficient | | 3  Proficient | | 2  Approaching Proficient | 1  Below Proficient |
| Focus and Organization  W.3.1a | Groups related information into a well formed paragraph(s).  Provides a clear introduction of the topic that states a clear opinion. | | Groups related information together into a paragraph.  Provides an introduction of the topic with an opinion. | | Groups some related information together.  Provides introduction of the topic but does not state an opinion. | Does not provide an  Introduction or an opinion. |
| Evidence and Elaboration  W.3.1b | Develops the topic and opinion with multiple examples of text evidence. | | Provides reasons from the text that support the opinion. | | Develops the topic and opinion with only one reason. | Provides no reason to support the opinion. |
| Transitions  W.3.1c | Correctly uses multiple linking words and phrases (because, therefore, since, and for example) to connect opinion and reasons (and paragraphs). | | Correctly uses linking words and phrases (because, therefore, since, and for example). | | Uses some linking words inaccurately. | Uses no linking words. |
| Conclusions  W.3.1d | Provides a strong concluding statement related to the information and ideas presented. | | Provides a concluding statement. | | Provides a concluding statement that does not relate to the topic. | A conclusion is not evident. |
| Conventions  L.3.1 & L.3.2 | Use purposeful, correct, and varied sentence structures.  Demonstrates creativity and flexibility when using conventions (grammar, punctuation, capitalization, and spelling) to enhance meaning. | | Use correct and varied sentence structures.  Demonstrate grade level appropriate conventions; errors are minor and do not obscure meaning. | | Uses some repetitive, yet correct sentence structure.  Demonstrates some grade level appropriate conventions, but errors obscure meaning. | Does not demonstrate sentence mastery.  Demonstrates limited understanding of grade level appropriate conventions, and errors interfere with the meaning. |
| **Step 5: Review and Revise** | | | | | | |