Science Exemplary Text
Student Handout

Recommended Levels of Insulation
Insulation levels are specified by R-Value. R-Value is a measure of insulation's ability to resist heat traveling through it. The higher the R-Value the better the thermal per

Zone	Add Insulation to Attic		Floor
	Uninsulated Attic	Existing 3–4 Inches of Insulation	
1	R30 to R49	R25 to R30	R13
2	R30 to R60	R25 to R38	R13 to R19
3	R30 to R60	R25 to R38	R19 to R25
4	R38 to R60	R38	R25 to R30
5 to 8	R49 to R60	R38 to R49	R25 to R30
Wall Insulation: Whenever exterior siding is removed on an Uninsulated wood-frame wall: Drill holes in the sheathing and blow insulation into the empty wall cavity before installing the new siding, and Zones 3–4: Add R5 insulative wall sheathing beneath the new siding Zones 5–8: Add R5 to R6 insulative wall sheathing beneath the new siding. Insulated wood-frame wall: For Zones 4 to 8: Add R5 insulative sheathing before installing the new siding.			

U.S. Environmental Protection Agency/U.S. Department of Energy. *Recommended Levels of Insulation.* (2010). http://www.energystar.gov/index.cfm?c=home_sealing.hm_improvement_insulation_table 2010.

This is an example of exemplary text found in *Common Core Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects: Appendix B Text Exemplars and Sample Performance Tasks.* Retrieved from http://www.corestandards.org/assets/Appendix_B.pdf

Science Exemplary Text
Teacher Resource

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Wall Insulation: Whenever exterior siding is removed on an

Uninsulated wood-frame wall:
Drill holes in the sheathing and blow insulation into the empty wall cavity before installing the new siding, and
Zones 3–4: Add R5 insulative wall sheathing beneath the new siding
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Insulated wood-frame wall:
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EFL 5
Word Count 165

Teacher introduces the text with minimal commentary and students read it independently. Teacher then reads passage aloud. Give a brief definition to words students would likely not be able to define from context (underlined in text). Teacher guides the students through a series of text-dependent questions. Complete the performance task as a cumulative evaluation of the close-reading.

Text-Dependent Questions

1. What is R-value and why is this important to know about?
2. If your house is in zone 4, how much insulation is needed if you already have 3 inches of insulation?
3. How does this amount (from question 2) compare to an uninsulated attic?
4. Explain how to insulate an uninsulated wall.
5. When would you need to use R49 to R60?

Performance Tasks for Informational Texts
Write a word problem using the chart to determine how much attic insulation is needed to be sufficient based on the current amount of attic insulation in your home. How does wall insulation affect the amount of insulation needed? [RST.9-10.7]

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