1-1-2019

5 Readings List for Fire and Ice

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Day	Reference or excerpt. Websites checked for currency.
Day 2	Bentham, M. A. (1937). Some Seventeenth Century views concerning the nature of heat and cold. *Annals of Science*, 2(4), 431-459.
	Boyle, R. I. (1772). New thermometrical experiments and thoughts. In T. Birch (Ed.), *The Works Of The Honourable Robert Boyle. In Six Volumes. To which is Prefixed The Life of the Author* (Vol. 2). Reprograsfischer Nachdruck der Ausgang. London 1772. Hildesheim: Georg Olms Verlagsbuchhandlung 1965, pp 481-487, 498-499,593.
	Christopoulou, C. (2008). Robert Boyle's experiments on cold: A study of the role of chemical experiments. In J. R. Bertomeu-Sanchez, D. T. Burns, B. Van Tiggelen (Eds.) *Neighbors and Territories: The Evolving Identity of Chemistry*, Proceedings of 6th International Conference on the History of Chemistry, pp 423-431. http://www.uv.es/comic/6ICHC/6ICHC.pdf
	Carlson, N.R. (1995). *Foundations of Physiological Psychology (*3rd ed., pp. 40-43). Allyn & Bacon. [action potential]
	Neuroscience for Kids. Retrieved Sept. 2017 from http://faculty.washington.edu/chudler/neurok.html
	How Stuff Works: How your brain works. Retrieved Sept. 2017 from http://science.howstuffworks.com/life/inside-the-mind/human-brain/brain1.htm
	University of North Carolina School of Medicine (2013). Hot and Cold Senses Interact: Cold perception is enhanced when nerve circuitry for heat is inactivated. Retrieved from ScienceDaily, Apr 8 https://www.sciencedaily.com/releases/2013/04/130408172243.htm
	Thermoreceptor. Retrieved Sept. 2017 from https://en.wikipedia.org/wiki/Thermoreceptor
	Neurotransmitter Receptor. Wikipedia Retrieved Sept. 2017 https://en.wikipedia.org/wiki/Neurotransmitter_receptor
Day 3	Halley, E. (1693). An account of several experiments made to examine the nature of the expansion and contraction of fluids by heat and cold, in order to ascertain the divisions of the thermometer, in all places, without adjusting by a standard. *Phil. Trans.* 17, 650-656. Doi:10.1098/rstl.1693.0013
	Thermoscope. Wikipedia. Retrieved July 2014.
	Romer Scale. Wikipedia, Retrieved July 2014.
	Roller, D. (1950). Evolution of the thermometer, in *The Early Development of the Concepts of Temperature and Heat: The rise and decline of the caloric theory*, Harvard Case Studies in Experimental Science, Cambridge: Harvard University Press.
Day6	Rumford, Benjamin Count of (1799). An inquiry concerning the weight ascribed to heat. *Phil. Trans. Royal Society,* 89, 179-194. DOI: 10.1098/rstl.1799.0012
	Hauksbee, F. (1708). An account of an experiment touching the different densities of common water, from the greatest degree of heat in our climate, to the freezing point, observ'd by a thermometer. *Phil. Trans. Royal Society,* 26, 267-268.
Day 9	Oleic Acid, Lauric Acid, Stearic Acid, Methyl Salicylate, Ethylene Glycol, Capsaicin, Menthol.

Christopher F. Bauer, Principal Investigator. This material is based upon work supported by the National Science Foundation under Grant No. 1245730. Any opinions, findings and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.

	Wikipedia. Retrieved February 2015.
	Barker, R. (1775). The process of making ice in the East Indies. *Phil. Trans. Royal Society*, 65, 252-257.
	Steam Burns, Retrieved Sept 2017 from www.physlink.com/Education/AskExperts/ae626.cfm.
	Williams, J. Latent heat supplies weather energy, Retrieved Sept. 2017 from www.usatoday.com/weather/wlatent.htm.
	How Stuff Works: The Sweat Gland. Retrieved Sept. 2017
	Bees need water, Retrieved Sept. 2017 from http://www.beesfordevelopment.org/documents/b/bees-need-water/.
	Swamp Cooling FAQ, Retrieved Sept. 2017 from http://www.air-n-water.com/.
Day 11	Melting Point and Freezing Point. Retrieved Sept 2017 from http://chemed.chem.purdue.edu/genchem/topicreview/bp/ch14/melting.php.
Day 14	Rumford, Benjamin Count of (1798). An inquiry concerning the source of the heat which is excited by friction. *Phil. Trans. Royal Society*, 88, 80-102.
	Joule, J. P. (1850). On the mechanical equivalent of heat. *Phil. Trans. Royal Society*, 140, 61-82 (used 61-64, 82).
Day 18	About Refractories. Retrieved Sept 2017 from http://www.refractoriesinstitute.org
	How Cement is Made. Retrieved Sept 2017 from http://www.cement.org/cement-concrete-basics/how-cement-is-made.
	The story of glass. Retrieved Sept 2017 from http://www.consol.co.za/
	National Steel Pellet Company. Iron Ore Processing for the Blast Furnace. Retrieved Sept 2017 from https://www.steel.org/~/media/Files/AISI/Making%20Steel/Article%20Files/ironore.PDF
	How aluminum is produced. Retrieved Sept 2017 from http://www.aluminiumleader.com/en/facts/extraction.
Day 19	Carroll, R. T. (est 1994), Fire Walking. In *The Skeptic's Dictionary*, Retrieved Sept 2017 from http://skepdic.com/firewalk.html.
	Brain, M. How Firewalking Works, Retrieved Sept 2017 from http://entertainment.howstuffworks.com/arts/circus-arts/firewalking.htm.
	Weil, A. A Firewalking Theory that can Benefit Everyone. Retrieved March 2015 from http://firewalking.com/theory.html.
	NASA. Staying Cool on the ISS, Retrieved Sept 2017 from http://science.nasa.gov/science-news/science-at-nasa/2001/ast21mar_1/.
	New Windows. In *Consumer guide to home energy savings: Condensed Online Version,* Retrieved Sept 2017 from http://www.aceee.org/consumerguide/.
	Efficient Windows Collaborative. Retrieved Sept 2017 from http://www.efficientwindows.org/.
	Neyfakh, L. (2014, December 21). The world that ice built: How a business carved from

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	frozen New England bonds shaped modern life", *Boston Globe: Ideas*.
	Heat exchange. Wikipedia, Retrieved April 2015.
	Heat sink. Wikipedia, Retrieved April 2015.
	Properties of water. Wikipedia, Retrieved April 2015.
Day 20	Bartholomew, G.A. & Hudson, J. W. (1961) Desert Ground Squirrels. *Scientific American* 204 (5) 107-116.
	Irving, L. (1966) Adaptations to Cold. *Scientific American*, 214(1) 94-101
Day 23	Roberts, R.M. (1989), Nobel: The man, the discoveries, and the prizes, in *Serendipity: Accidental Discoveries in Science.* (pp. 83-95) New York: Wiley.
	Saavedra, M. B. Nitrate, in International Encyclopedia of the First World War. Retrieved Sept. 2017 from http://encyclopedia.1914-1918-online.net/article/nitrate.
Day 26	Second Law of Thermodynamics. Retrieved Sept. 2017 from http://hyperphysics.phy-astr.gsu.edu/hbase/thermo/seclaw.html.
	Asimov, I. (1956). The Last Question, *Science Fiction Quarterly*, November. Retrieved Sept 2017 from https://en.wikipedia.org/wiki/The_Last_Question and http://multivax.com/last_question.html

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