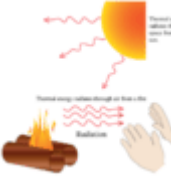



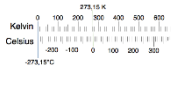







DU 7. IMAGES					
CAPTURA	REFERENCIA	NOME	AUTORÍA	REPOSITORIO/URL	LICENZA
	Figure 1.20	Atom Sym	Orion1961	https://commons.wikimedia.org/wiki/File:Atom_sym.png	 CC BY-SA 4.0
	Figure 7.1	7deathvalley	Ken Kistler	https://www.publicdomainpictures.net/es/view-image.php?image=109181&picture=faded-death-valley-dunas	 CC0 Public Domain
	Figure 7.2	7thermalcompare		http://www.flickr.com/photos/90037546@N00/3156066767/ ; right: http://www.flickr.com/photos/escapadarural/9309378774/	 CC BY 2.0
	Figure 7.3	7fever	mohamed hassan /	https://pxhere.com/en/photo/1445397	 CC0 Public Domain
	Figure 7.4	7thermometer	Gringer	https://commons.wikimedia.org/wiki/File:Thermometer_CF.svg	 public domain.
	Figure 7.5	7thermometers2	Emeka Udenze	https://commons.wikimedia.org/wiki/File:Temperature_Scales.png	 CC0 1.0 Universal Public Domain Dedication.
	Figure 7.6	7Thermal expansion joint	Michiel1972	https://commons.wikimedia.org/wiki/File:Expansion_joint_Golden_Gate_Bridge.jpg	 CC BY-SA 3.0
	Figure 7.7	7pool	Linnaea Mallette	https://www.publicdomainpictures.net/es/view-image.php?image=224807&picture=balsas-de-piscina	 CC0 1.0
	Figure 7.8	7heattransfer	OpenStax	https://commons.wikimedia.org/wiki/File:CNX_Chem_05_01_HeatTrans1.jpg	 CC BY 4.0

	Figure 7.9	7cola		https://pxhere.com/en/photo/1198008	 CC0 Public Domain
	Figure 7.10	10cookingpot		https://pixabay.com/es/vectors/olla-de-cocci%3b3n-cook-ware-horno-159470/	Pixabay License Gratis para usos comerciales No es necesario reconocimiento
	Figure 7.11	7convection1	s4rs	https://openclipart.org/detail/241208/heat-conduction	 CC0 1.0 Public Domain Dedication
	Figure 7.12	7conduction	MikeRun	https://commons.wikimedia.org/wiki/File:Heat-conduction.svg	 CC BY-SA 4.0
	Figure 7.13	7ironing	Colin	https://commons.wikimedia.org/wiki/File:Ironing_a_shirt.jpg	 CC BY-SA 3.0
	Figure 7.14	7boilingwater	Public Domain Vectors	https://publicdomainvectors.org/en/free-clipart/Boiling-water-in-a-pot/83439.html	 CC0 1.0 Public Domain Dedication
	Figure 7.15	7convection	Megan Beckett	https://www.flickr.com/photos/121935927@N06/13580657143	 CC BY 2.0
	Figure 7.16	7seabreeze	Zachary Wilson CK-12 Foundation	https://www.ck12.org/physics/convection/lesson/Convection-MS-PS/	 CC BY-NC 3.0
	Figure 7.17	7bonfire	GerhardLipold	https://pxhere.com/en/photo/1632780	

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					CC0 1.0 Public Domain Dedication
	Figure 7.18	7radiation2	Credit: Zachary Wilson Source: CK-12 Foundation	https://flexbooks.ck12.org/cbook/ck-12-middle-school-physical-science-flexbook-2.0/section/15.7/primary/lesson/thermal-radiation-ms-ps/	 CC BY-NC 3.0
	Figure 7.19	7heattransfer3	BruceBlais	https://commons.wikimedia.org/wiki/File:Heat_Transfer.png	 CC BY-SA 4.0
	Figure 7.20	7celsiuskelvin	Bitjungle	https://commons.wikimedia.org/wiki/File:Kelvin og Celsius_temperaturskalaer.png	 CC BY-SA 4.0
	Figure 7.21	7hotoven	StockSnap	https://www.stockvault.net/photo/190961/food	 CC0 1.0 Public Domain Dedication
	Figure 7.22	7heatison	OpenClipart	https://freessvg.org/1541629296	 Public Domain

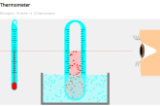




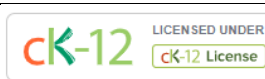


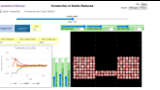



DU 7. VIDEO

	Video 7.1	7videoheatisenergysong	Nancy Bennett	https://www.youtube.com/watch?v=QGcDcSXjuEs	Creative Commons Attribution licence (reuse allowed)
	Video 7.2	7video thermal energy heat	Amazing Science	https://www.youtube.com/watch?v=eYeKW8AzPI8	Creative Commons Attribution licence (reuse allowed)
	Video 7.3	7video Specific Heat capacity	FuseSchool - Global Education	https://www.youtube.com/watch?v=TqJFIBODrjM	Creative Commons Attribution licence (reuse allowed)
	Video 7.4	7video heat transfer	Brain Pop Amazing Science	https://www.youtube.com/watch?v=stByRrQjd_U	Creative Commons Attribution licence (reuse allowed)

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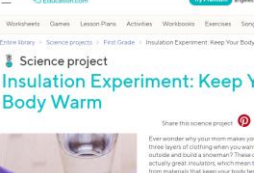
	Video 7.5	7heattransfer	Wisc-Online	https://www.youtube.com/watch?v=lvYCe0UaqJY	Creative Commons Attribution licence (reuse allowed)
	Video 7.6	7video thermal conductivity experiment	ThinkTac	https://www.youtube.com/watch?v=3vcoN9YVNHw	Creative Commons Attribution licence (reuse allowed)
	Video 7.7	7videoinfraredcamera	cg-physics-global	https://www.youtube.com/watch?v=QKYbXsLBDGE	Creative Commons Attribution licence (reuse allowed)

DU 7. SIMULACIONES

	7sim Thermometer	By JavaLab	https://javalab.org/en/thermometer_en/	 CC BY-SA
	7sim density	SERP SciGen Unit M2 • Determining Density	https://serpmedia.org/scigen/m2.3a.html	 CC BY-SA
	7sim Hot Oven	ck12 Exploration Series. Physics Simulations simulations	https://interactives.ck12.org/simulations/physics/hot-oven/app/index.html	
	7sim Particle simulation of thermal conduction	By JavaLab	https://javalab.org/en/conduction_2_en/	 CC BY-SA
	7sim Conduction in solids	Novak, M. (2019). OpenSciEd Conduction in Solids Reduced NetLogo Model. http://www.openscienced.org/ OpenSciEd Middle School Curriculum series.	https://htmlsimulations.s3.us-west-1.amazonaws.com/Conduction-in-Solids-Reduced.html	 BY NC SA
	7sim Heating and cooling a liquid	American Chemistry Society ACS Chemistry for Life	https://www.middleschoolchemistry.com/multimedia/chapter1/lesson2#heating_and_cooling	Copyright 2022 American Chemical Society
	7sim Heating and cooling a thermometer	American Chemistry Society ACS Chemistry for Life	https://www.middleschoolchemistry.com/multimedia/chapter1/lesson3	Copyright 2022 American Chemical Society














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DU 7. WEB RESOURCES / ACTIVITIES

	<u>7 Heat and temperature memory card game</u>	Ashley Aslesen	https://www.teacherspayteachers.com/Product/Heat-and-Temperature-Memory-Card-Game-Science-443503
	<u>7 Liveworksheets Heat transfer</u>	LIVEWORKSHEETS	https://www.liveworksheets.com/search.asp?content=heat+transfer
	<u>7 Heat energy jeopardy</u>	PowerShow.com	https://www.powershow.com/view/e9f19-ZTFmN/Heat_Energy_Jeopardy_powerpoint_ppt_presentation
	<u>7 ppt heat and temperature</u>	TES Seasquirt's Shop	https://www.tes.com/teaching-resource/heat-and-temperature-6425746
	<u>7 Lesson plan Heat temperature and conduction</u>	American Chemical Society ACS Chemistry for Life	https://www.middleschoolchemistry.com/lessonplans/chapter2/lesson1
	<u>7 lessonplan thermal energy</u>	OpenSciEd Unit 6.2 Thermal Energy	https://www.openscienced.org/instructional-materials/6-2-thermal-energy/
	<u>7project Insulation Experiment: Keep Your Body Warm</u>	Education.com Science project Insulation Experiment: Keep Your Body Warm	https://www.education.com/science-fair/article/insulation-experiment/

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DU 7. TEXTBOOKS / LESSONS/ARTICLES

	7ck12textbookphysscience	CK-12 Physical Science Concepts for Middle School	https://www.oercommons.org/courses/ck-12-physical-science-concepts-ca-textbook-for-middle-school	
	7energyefficiencyreading	EESI Environmental and energy study institute	https://www.eesi.org/topics/energy-efficiency/description https://www.eesi.org/about/copyright	 CC BY 4.0
	7physicsscalestext	Douglas College Physics 1207 by OpenStax i s licensed under a Creative Commons Attribution 4.0 International License,	https://pressbooks.bccampus.ca/introductorygeneralphysics2phys1207/chapter/13-1-temperature/	Creative Commons Attribution 4.0 International License,
	7thermalexpansiontext	College Physics by OSCRice University	https://openstaxcollegephysics.org/chapter/thermal-expansion-of-solids-and-liquids/	 CC BY 4.0
	7charleslawtext		https://learnbps.bismarckschools.org/mod/book/view.php?id=89463&chapterid=38127	©CK-12 Foundation Licensed under  CC BY-NC 3.0
	7heatironactivity	This project was supported by Science Sandbox, a Simons Foundation initiative dedicated to engaging everyone with the process of science.	https://serpmedia.org/scigen/m2.3a.html	
	7 Middle School Science Lesson Resources	Americal Chemical society ACS	https://www.middleschoolchemistry.com/lessonplans/chapter2/lesson1	Permission is granted in advance to photocopy lessons and activity sheets , and to use animations and videos in the classroom or for non-commercial teacher professional development workshops.