

1. Record Nr.	UNINA9910438347903321
Autore	Hess Karl
Titolo	Working Knowledge : STEM Essentials for the 21st Century // by Karl Hess
Pubbl/distr/stampa	New York, NY : , : Springer New York : , : Imprint : Springer, , 2013
ISBN	9781461432753 1461432758
Edizione	[1st ed. 2013.]
Descrizione fisica	1 online resource (329 p.)
Disciplina	621.042
Soggetti	Science - Study and teaching Engineering Life sciences Social sciences Humanities Science Mathematics Science Education Technology and Engineering Life Sciences Humanities and Social Sciences Physical Sciences Mathematics and Computing
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Mathematics: the Study of Quantity, Structure, Space and Change -- Science: the Process of Understanding the Natural World and its Possibilities -- Engineering and Technology: Math and Science Meet Creativity and Design -- STEM in Our Daily Lives -- Some More Advanced STEM Problems.
Sommario/riassunto	Working Knowledge: STEM Essentials for the 21st Century is designed to inspire a wide range of readers from high school and undergraduate students with an interest in Science, Technology, Engineering, and Mathematics (STEM) to STEM teachers and those who

wish to become teachers. Written by renowned scientist and teacher Dr. Karl Hess of the University of Illinois at Urbana, a member of both the National Academy of Sciences and the National Academy of Engineering, the book presents a critical collection of timeless STEM concepts and connects them with contemporary research advances in addition to the needs of our daily lives. With an engaging and accessible style not requiring a formal background in STEM, Dr. Hess takes the reader on a journey from Euclidean Geometry and Cartesian Coordinates up through 21st Century scientific topics like the global positioning system, nanotechnology, and super-efficient alternative energy systems. Working Knowledge: STEM Essentials for the 21st Century at once serves as an almanac on the fascinating physical, chemical, quantitative features of the natural world and built environment, as well as a need-to-know list of topics for students, teachers, and parents interested in STEM education.
