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Titolo	3D Printed Science Projects Volume 1 : Ideas for Your Classroom, Science Fair, or Home // by Joan Horvath, Rich Cameron
Pubbl/distr/stampa	Berkeley, CA : , : Apress : , : Imprint : Apress, , 2024
ISBN	9798868803420
Edizione	[2nd ed. 2024.]
Descrizione fisica	1 online resource (351 pages)
Collana	Maker Innovations Series, , 2948-2550
Disciplina	004.7
Soggetti	Three-dimensional printing Science projects Computer input-output equipment Computer-aided engineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Chapter 1: Math Modeling with 3D Prints -- Chapter 2: Light and Other Waves -- Chapter 3: Gravity -- Chapter 4: Airfoils -- Chapter 5: Simple Machines -- Chapter 6: Plants and Their Ecosystems -- Chapter 7: Molecules -- Chapter 8: Trusses -- Chapter 9: Gears -- Appendix A: Links.
Sommario/riassunto	Create 3D printable models that can help students from kindergarten through grad school learn math, physics, botany, chemistry, engineering and more. This book shows parents and teachers how to use the models inside as starting points for 3D printable explorations. Students can start with these models and vary them for their own explorations. Unlike other sets of models that can just be scaled, these models have the science built-in to allow for more insight into the fundamental concepts. Each of the eight topics is designed to be customized by you to create a wide range of projects suitable for science fairs, extra credit, or classroom demonstrations. Science fair project suggestions and extensive "where to learn more" resources are included, too. You will add another dimension to your textbook understanding of science. For this New Edition: The second edition of 3D Printed Science Projects is a thorough update of the original, modernizing the 3D printing technology. 3D Printed Science Projects

shows you how to create 3D printable models that can help students from kindergarten through grad school learn math, physics, botany, chemistry, engineering and more. Each of the models is created in the free, open source CAD program OpenSCAD, so it can be customized by the reader. This allows the models to be the basis of open-ended STEM projects at a variety of levels. What You'll Learn Create (and present the science behind) 3D printed models. Use a 3D printer to create those models as simply as possible. Discover new science insights from designing 3D models. Who This Book Is For 3D Printed Science Projects particularly targets the technology-squeamish teacher or parent who want their kids to learn something from their 3D printer but need help getting started. Kids who love science, homeschoolers (and the grandmas who buy them birthday presents) will be customers. .
