

Blocks for Learning: A Bibliography of Resources

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*Annotations have been excerpted and/or adapted from descriptions provided by the publishers.

371.337 H249

Hansel, Rosanne Regan

Creative block play: a comprehensive guide to learning through building

St. Paul, MN: Redleaf Press, 2017.

Subjects: Early childhood education. Block building (Children's activity).

Summary: This book covers everything you need to encourage a child's development in a variety of domains through block play. It is full of photos that illustrate block play in real classrooms and stories from teachers who have successfully used block play to encourage children's development in a variety of domains.

372.21 P541

Phelps, Pamela C.

Let's build: strong foundations in language, math, and social skills

Lewisville, NC: Gryphon House, Inc., 2012.

Subjects: Language arts (Early childhood)—Activity programs. Blocks (Toys) in mathematics education. Social skills—Study and teaching (Early childhood)—Activity programs. Blocks (Toys). Early childhood education—Activity programs.

Summary: Blocks are a key teaching tool in any early childhood program. Through well-planned, teacher-supported block play experiences, young children can build math, language, and social skills. This book provides educators of young children with guidance in how to create early childhood environments that support children's natural need to play. It includes strategies for creating and scaffolding the block play experience, recommends children's books that support learning, and outlines ways to match behaviors, content, and concepts to learning standards. Lesson plans are based on ten broad themes including: Large Buildings Around the World, Wild Animals, Ways to Travel, and Our Families and Ourselves.

372.35 C441

Chalufour, Ingrid; Worth, Karen

Building structures with young children

St. Paul, MN: Redleaf Press, 2004.

Subjects: Building—Study and teaching (Early childhood). Block building (Children's activity).

Summary: Help deepen children's understanding of the physical science present in building block structures—including concepts such as gravity, stability, and balance.

Notes: Prekindergarten curriculum. Kindergarten curriculum renewal.

372.35 H236

Lawson, Jennifer E. (Ed.)

Hands-on science. Everyday structures : physical science (structures and mechanisms)

Subjects: Structural engineering—Study and teaching (Primary). Buildings—Study and teaching (Primary).

Summary: The seven lessons in this module introduce students to concepts related to structures, including what a structure is, and where structures are found and used in the natural and manufactured world. Students use the design process to plan and construct their own structures.

Notes: Science grade 1 (2010). Grades K-1. Reproducible activity sheets are included.

372.35 H236

Lawson, Jennifer E. (Ed.)

Hands-on science. Materials and structures : physical science (structures and mechanisms)

Winnipeg, MB: Portage and Main Press, 2001.

Subjects: Materials—Study and teaching (Primary). Structural engineering—Study and teaching (Primary).

Summary: Grades 2-3. Reproducible activity sheets are included.

372.35 M823

Moore, Nancy

Structures – too!

Barrie, ON: Exclusive Educational Products, 1995.

Subjects: Mathematics—Study and teaching (Elementary). Technology—Study and teaching (Elementary). Science—Study and teaching (Elementary).

Notes: Design Studies 10, 20. Mathematics K-5. Mathematics Middle Level.

372.35 S796

McNair, Shannan (Ed.)

Start young! : early childhood science activities

Arlington, VA: NSTA Press, 2006.

Subjects: Science—Study and teaching (Early childhood).

Summary: This book offers a wealth of simple educational activities designed to use right away with even the littlest scientists. Among the topics: playful science activities for young children; the science and mathematics of building structures; planning a rock day; what makes miniature sleds go, go, go; figuring out how big is big and how big is small; learning about birds, flight, ponds, and the environment; and creating science centres for all students.

Notes: Kindergarten curriculum renewal. Science grade 1 (2010). Science grade 2 (2010).

372.7 M426

Goodnow, Judy

Math discoveries with base ten blocks. Grades 1-3

Alsip, IL: Ideal School Supply Company, 1994.

Subjects: Manipulatives (Education). Mathematics—Study and teaching (Primary). Decimal system—Study and teaching (Primary).

Summary: Mathematics K-5.

372.7 M426

Hoogeboom, Shirley

Math discoveries with pattern blocks. Grades 2-3

Alsip, IL: Ideal School Supply Company, 1994.

Subjects: Manipulatives (Education). Geometry—Study and teaching (Primary). Mathematics—Study and teaching (Primary).

Summary: Mathematics K-5.

372.7 P776

Pollman, Mary Jo

Blocks and beyond : strengthening early math and science skills through spatial learning

Baltimore, MD: Paul H. Brookes, 2010.

Subjects: Problem-based learning. Science—Study and teaching. Mathematics—Study and teaching.

372.7 S849

Stewart, Kelly

20 thinking questions for pattern blocks. Grades 1-3

Mountain View, CA: Creative Publications, 1995.

Subjects: Mathematics—Study and teaching (Elementary). Manipulatives (Education).

372.7 W181

Walker, Kathryn

20 thinking questions for base ten blocks. Grades 3-6

Mountain View, CA: Creative Publications, 1995.

Subjects: Mathematics—Study and teaching (Elementary). Manipulatives (Education).

372.7 W181

Walker, Kathryn

20 thinking questions for pattern blocks. Grades 5-6

Mountain View, CA: Creative Publications, 1995.

Subjects: Manipulatives (Education). Mathematics—Study and teaching (Elementary).

428.6 K19

Kaslik, Ibi

Structures in the Arctic

Iqaluit, NU: Inhabit Education, 2016.

Subjects: Readers (Primary). Inuit—Canada, Northern—Social life and customs—Juvenile literature. Inukshuks—Juvenile literature. Buildings—Northern, Canada—Juvenile literature. *Summary:* Learn about the different structures you can see every day in the North. This book introduces children to the features of man-made structures commonly seen in the North, like igloos and Inukshuks, and structures familiar throughout Canada, like airports and houses.

428.6 O98

Super structures [kit]

Oxford, UK: Oxford University Press, 2010.

Subjects: Readers (Elementary). Structural engineering—Study and teaching—Activity program—Juvenile literature. Buildings—Study and teaching—Activity program—Juvenile literature. Language arts.

Summary: Read and discover all about super structures around the world. What are dams made of? How tall can a skyscraper be?

510 A465

Altamuro, Vincent J.; Clarkson, Sandra Pryor

Advanced pattern block book. Grades 5-8

Rowley, MA: Didax, Inc., 2010.

Subjects: Blocks (Toys) in mathematics education. Form perception—Study and teaching (Middle school). Mathematics—Problems, exercises, etc. Mathematics—Study and teaching (Middle school). Manipulatives (Education).

Summary: This resource contains 60 complete activities with teaching instructions, blackline masters, and connections to NCTM content. It covers fractions and equivalence, line and rotational symmetry, classifying polygons, area and perimeter, patterning and probability.

513.213 D613

Disseler, Shirley

Teaching multiplication using LEGO® bricks

St. Johnsbury, VT: Brigantine Media/Compass Publishing, 2016.

Subjects: Multiplication—Study and teaching (Primary). Multiplication—Study and teaching (Elementary). Arithmetic—Study and teaching (Elementary). Mathematics—Study and teaching (Elementary). Teaching—Aids and devices.

Summary: This book presents activities that work to help students learn the basics of multiplication, using a common toy available in most classrooms and homes—LEGO bricks. Multiplication is not simply the rote memorization of times tables. Students need to understand the concepts.

513.214 D613

Disseler, Shirley

Teaching division using LEGO® bricks

St. Johnsbury, VT: Brigantine Media/Compass Publishing, 2016.

Subjects: Division—Study and teaching (Primary). Arithmetic—Study and teaching (Elementary). Division—Study and teaching (Elementary). Mathematics—Study and teaching (Elementary). Teaching—Aids and devices.

Summary: The author has developed activities that work to help students learn the basics of division, using a common toy available in most classrooms and homes—LEGO® bricks. True understanding of division goes far beyond memorizing facts. Modeling the process of division with LEGO® bricks helps students visualize the math problem.

513.26 D613

Disseler, Shirley

Teaching fractions using LEGO® bricks

St. Johnsbury, VT: Brigantine Media/Compass Publishing, 2016.

Subjects: Teaching—Aids and devices. Fractions—Study and teaching (Elementary). Fractions—Study and teaching (Primary). Mathematics—Study and teaching (Elementary). Arithmetic—Study and teaching (Elementary).

Summary: Many students struggle with learning fractions. Teachers struggle, too, in finding ways to teach the concepts. LEGO® bricks help students learn the mathematical concepts through modeling.

618.928916 L516

LeGoff, Daniel B; Gomez De La Cuesta, Gina

LEGO®-based therapy : how to build social competence through LEGO®-based clubs for children with autism and related conditions

London, England : Jessica Kingsley Publishers, 2014.

Subjects: Autism spectrum disorders in children—Treatment. Social skills in children—Study and teaching. Lego toys. Play therapy.

Summary: By providing a joint interest and goal, LEGO® building can become a medium for social development such as sharing, turn-taking, making eye-contact, and following social rules. This book outlines the theory and research base of the approach and gives advice on all practical considerations including space, the physical layout of the room, choosing and maintaining materials, as well as strategies for managing behaviour, further skill development, and how to assess progress.

624 E61

Enz, Tammy

Super cool construction activities with Max Axiom

North Mankato, MN : Capstone Press, c2015.

Subjects: Building—Juvenile literature. Science—Comic books, strips, etc. Graphic novels. Structural engineering—Comic books, strips, etc.

Summary: Super Scientist, Max Axiom, presents step-by-step photo-illustrated instructions for building a variety of structures and contraptions.

624.1 C951

Fazio, Xavier

Design team

Toronto, ON: Scholastic Canada, Ltd. 2000.

Subjects: Structural engineering—Juvenile literature.

Notes: Science grade 1 (2010). Simple Machines.

624.1 C951

Cross, Gary

Build it up

Toronto, ON: Scholastic Canada, Ltd., 2000.

Subjects: Structural engineering—Juvenile literature.

Notes: Science Elementary Level—Grade 3 and Grade 5.

624.10971 S553

Sherman, Jill

Skyscrapers

Collingwood, ON: True North, 2017.

Subjects: Skyscrapers—Canada—Juvenile literature.

Summary: Canada is filled with marvels of modern-day architecture and engineering. This book spotlights a few of Canada's tall buildings.

688.725 E49

Elsmore, Warren

Brick wonders : ancient, modern, and natural wonders made from LEGO®

Hauppauge, NY: Barron's Educational Series, 2014.

Subjects: LEGO toys. Models and modelmaking.

Summary: Featuring drawings of structural details to guide model builders, this book presents a modeler's panorama of the world's most breathtaking wonders. More than 400 full-color instructional and inspirational images are included.

690 R611

Ritchie, Scott

Look at that building! : a first look at structures

Toronto, ON: Kids Can Press, 2011.

Subjects: Building—Juvenile literature.

Summary: By checking out structures big and small, children will learn about how buildings are made, what makes them strong, and what keeps them standing.

725.970971 M818

Mooney, Carla

Towers

Collingwood, ON: True North, 2017.

Subjects: Towers—Canada—Juvenile literature.

Summary: Canada is filled with marvels of modern-day architecture and engineering. This resource showcases Canadian structures with a height much greater than the width of the building—a tower.

726.6 W341

Watson, Percy

Building the medieval cathedrals

Minneapolis, MN: Lerner Publications, 1979.

Subjects: Cathedrals—England. Architecture, Medieval—England.

813.6 A437

Alling, Niki

When I build with blocks

United States: Create Space: 2012.

Subjects: Creative ability—Juvenile fiction. Blocks (Toys)—Juvenile fiction. Play—Juvenile fiction. Block building (Children's activity)—Juvenile fiction.

Summary: In the block area at school, children can be anything and build anything using their imaginations.

813.6 S848

Stevenson, Robert Louis

Block city

New York, NY: Simon & Schuster Books for Young Readers, 2005.

Subjects: English poetry. Children's poetry, English. Blocks (Toys)—Juvenile poetry.

Summary: A child creates a world of his own which has mountains, a sea, a city and ships, all from toy blocks.

813.6 S848

Stevenson, Robert Louis

Block city: Poems and activities

Columbia, MO: Songbird Publishing, 2011.

Subjects: Blocks (Toys)—Juvenile fiction. Education, Preschool—Juvenile fiction.

Summary: This volume of hands-on fun inspired by classic literature includes: "Block City," Folk Songs, Building Projects, and Math Activities. Enjoy the follow-up activities created by Dawn Heston, author, parent and educator with the whole family. *Block City* is part of the series Building Connections.