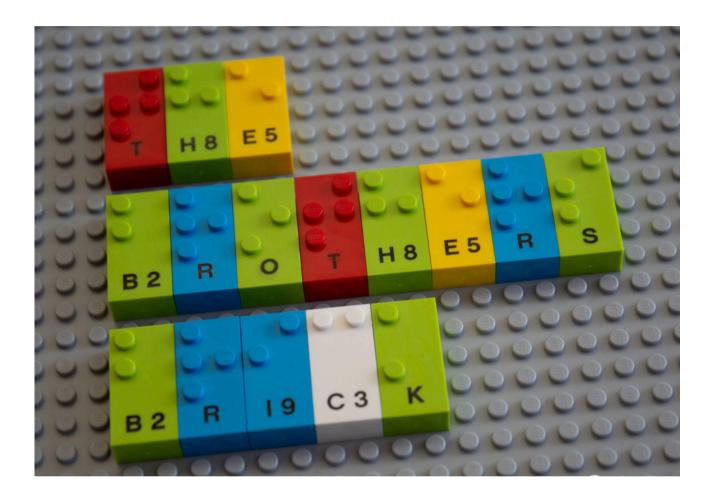
LEGO Braille Bricks





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LEGO Braille Bricks

The LEGO Braille Bricks set is a hands-on learning tool designed to help children with visual impairments develop literacy and tactile skills through play. Each brick features raised studs arranged in the pattern of Braille letters, numbers, and symbols, with printed characters underneath for sighted users. The set encourages inclusive learning by allowing both visually impaired and sighted students to engage in interactive activities that build literacy, problem-solving, and fine motor skills. By combining the familiar LEGO system with Braille education, the set fosters collaboration, creativity, and accessibility in the classroom.



Grade Level

PK - 12th grades

Group Size

Up to 4 students per group

60 minutes - multisession

Time Duration

Content of Kits

Components

- 2x LEGO build plates
- 4x packets of braille LEGO bricks
- User guide



Usage

Getting Started

- 1. Introduce Braille Basics Begin by explaining Braille and its importance, allowing students to explore the raised dots on the bricks, and comparing them to printed letters.
- 2. Hands-On Letter Recognition Have students match LEGO Braille Bricks with corresponding printed letters or words to build familiarity with the tactile system.
- 3. Simple Word Building Encourage students to build short words using the bricks, reinforcing literacy skills through hands-on engagement.
- Interactive Storytelling Let students create sentences or short stories using Braille bricks, fostering creativity while strengthening their reading and writing skills.

Storage

Keep the kit and all its components stored safely when not in use, preferably in a dry and organized space.

Troubleshooting

- Ensure Proper Orientation Make sure the bricks are facing the correct way so that Braille characters can be read accurately.
- Organize for Easy Access Sort bricks by letters or numbers to help students locate pieces more efficiently.
- Check for Tactile Clarity If a brick's studs feel worn or unclear, replace it with one in better condition for improved readability.
- Adapt for Different Learning Styles Pair Braille bricks with verbal instructions or printed materials to support diverse learners.



Activity Guide

Beginner

Braille Letter Matching

Students will explore the Braille alphabet by matching LEGO Braille Bricks to corresponding printed letters. This activity builds familiarity with Braille through tactile learning, reinforcing letter recognition and early literacy skills.

Intermediate

Word Formation Challenge

Using the LEGO Braille Bricks, students will construct simple words based on prompts or word lists. This hands-on approach strengthens spelling, reading comprehension, and Braille fluency while encouraging independent learning.

Advanced

Building & Storytelling

Students will create full sentences or short stories using Braille Bricks, combining literacy and creative writing skills. This activity helps develop sentence structure, storytelling, and confidence in reading and writing Braille.

Extension Activities:

Collaborative Braille Puzzles

Students will design word puzzles or coded messages using LEGO Braille Bricks for classmates to decode. This interactive challenge fosters teamwork, problem-solving, and deeper engagement with Braille literacy.

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Learning Extensions

STEAM Connections: Literacy - Coding - Math

Learning Objectives:

- Braille Literacy Develop letter and number recognition, spelling, and reading skills using Braille patterns.
- Independent Learning Support self-paced exploration, enabling students to build confidence and autonomy in their literacy journey.
- STEM Integration Connect Braille literacy with foundational STEM principles such as pattern recognition, coding basics, and structured problem-solving.

Career Connections:

- Assistive Technology Specialist Designs and implements tools and technologies that support individuals with disabilities, including Braille literacy solutions.
- **Special Education Teacher** Supports students with visual impairments, helping them develop essential skills through tailored learning methods.
- Accessibility Consultant Works with businesses and organizations to ensure products, services, and environments are accessible to people with disabilities, including creating Braille-based resources.

Essential Employability Skills:

- Attention to detail,
- Problem-solving,
- Communication,
- Adaptability.





Resources and Accessibility

Safety Guidelines

- Supervision Always supervise students during play and learning to ensure proper handling of the bricks.
- Avoid Choking Hazards Ensure that younger students do not place bricks in their mouths, as they may pose a choking hazard.
- Keep Pieces Organized To prevent the loss of small parts and ensure safe use, keep the LEGO Braille Bricks organized and stored properly.
- Clean Regularly Wipe down bricks with a damp cloth to maintain hygiene, especially when shared among multiple users.

<u>Accessibility</u>

- Clear tactile labels Ensure access to a variety of tactile labels and Braille materials to support easy navigation of the Braille bricks.
- Adapted workspaces Provide a quiet, well-lit space with adequate tactile surfaces to help students with visual impairments focus.
- Supportive tools Use additional tools such as Braille rulers or magnifiers if needed to help students accurately position and manipulate the bricks for their activities.

Library Catalog



Library Resources



Feedback

QR to feedback survey

