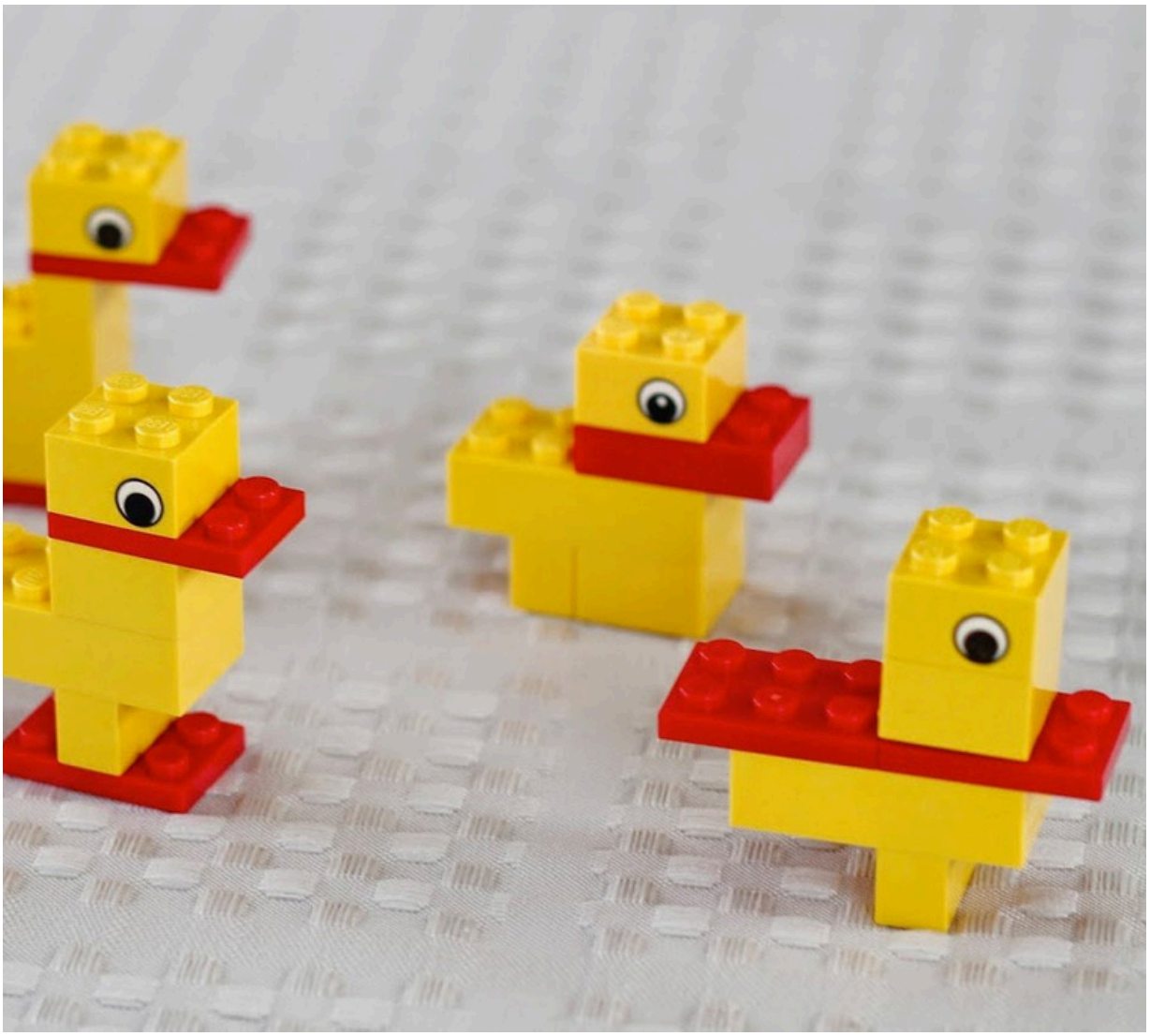
LEGO Six Bricks



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LEGO Six Bricks

LEGO Six Bricks is a hands-on learning tool designed to build essential cognitive, motor, and emotional skills through play-based activities. With just six brightly colored bricks, students engage in short, interactive exercises that strengthen memory, problem-solving, collaboration, and fine motor development. This versatile resource supports early learning in math, literacy, and spatial reasoning while fostering creativity and social interaction.

Grade Level 3rd - 12th grades

Group Size Up to 50 participants

Time Duration 15 minutes

Content of Kits

Components

- 50 Six Brick sets
  - 2 - tall 2x2 bricks
  - 2 - short 2x3 bricks
  - 1 - tall 2x3 brick
  - 1 - tall 2x1 brick

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Usage

Getting Started

1. **Distribute Six Bricks Sets** – Hand out a set of Six Bricks to each participant, keeping the lids closed until the activity begins, ensuring fairness.

2. **Introduce the Challenge** – Explain the objective: using all six bricks, participants will have 60 seconds to create a duck.

3. **Build and Share** – Start the timer and allow participants to build their ducks, then have them share their creations, noting the variety of designs.

4. **Encourage Reflection** – Discuss the number of different ducks, discuss the vast number of possible combinations, and explore how creativity and collaboration leads to innovative problem-solving.

Storage

Break apart bricks and return each set of Six brick back to their individual tin. Keep them in storage bin when not in use.

Troubleshooting

If LEGO pieces are not clicking together, make sure that the studs on top of the bricks are intact and that no foreign objects are obstructing the open space on the bottom of the bricks.

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Activity Guide

LEGO Six Bricks: How Many Ways Can you Make A Duck?

1. **Hand out Six Bricks Sets:** Give each participant their own tin containing a Six Bricks set. Ask them to keep the lid closed to discourage time advantages.
2. **Introduce Activity:** Explain that participants have six pieces in their kits and 60 seconds to build a duck.
3. **Build a Duck:** Turn on a 60-second timer and allow participants to start building their ducks.
4. **Share the Results:** Have the participants share their ducks. Note the diversity and similarities in the variety of ducks made by the group.
5. **Explore the Possibilities:** Ask the participants how many different LEGO combinations can be made with six bricks. Once everyone has answered, share the true number (included below) and let that lead to a discussion about how with collaboration, finding creative and innovative solutions to a problem is much easier.
6. **Post Reflection Discussion:** Discuss the experience and what was learned.

Did You Know...

With just six LEGO bricks, there are 915,103,765 different possible combinations.

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Learning Extensions

STEAM Connections: Math - Engineering - Science - Tech - Art

Learning Objectives:

- Develop critical thinking and problem-solving skills through task-based puzzles.
- Build rapid decision-making skills.
- Strengthen fine motor skills and spatial awareness with hands-on activities.
- Encourages creativity and innovative thinking.

Career Connections:

- **Early Childhood Education –** Develops skills in interactive teaching, child development, and educational game design.
- **Cognitive Science & Psychology –** Encourages observation of learning behaviors, memory recall, and sensory processing.
- **Occupational Therapy & Rehabilitation –** Builds foundational motor skills that are essential for therapy and adaptive learning.
- **Leadership & Team Facilitation** – Strengthens communication, problem-solving, and group management skills, which are essential for roles in coaching, mentoring, and organizational leadership.

Essential Employability Skills:

- Problem-Solving
- Focus
- Creativity
- Adaptability

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Resources and Accessibility

Safety Guidelines

- To avoid choking hazards, ensure students do not put small pieces in their mouths.

Accessibility

- **Tactile Learning** – The bricks provide a hands-on, sensory-based learning experience beneficial for students with visual impairments or sensory processing needs.
- **Verbal & Visual Instructions** – Activities can be adapted with spoken directions, large print guides, or Braille materials for diverse learning needs.
- **Adaptive Motor Skill Exercises** – Adjust activities for students with fine motor challenges, allowing them to engage in ways that accommodate their abilities.

Library Catalog

Library Resources

Feedback

QR to feedback survey