

# Café+

## Teacher Guide Introduction

### Who is the material for?

The Café+ Teacher Guide is for preschool teachers. It is designed to help teachers develop children's early math skills, such as counting, matching quantities, simple addition and subtraction, and recording data.

### What is it for?

Designed for preschool children, the café theme naturally incorporates math, enabling children to explore math-related concepts as they build café items in a familiar setting. As they role-play café scenarios, they'll practice counting by pricing their items, and explore trade as they play customer and café owner!

The Café+ Teacher Guide provides fun and engaging opportunities for exploring math-related concepts. Using the Teacher Guide, preschool teachers can facilitate exciting math lessons in which children practice simple addition as they decide how many bricks (i.e., ingredients) they need for their recipes. They will follow simple building instructions using the recipe cards, challenging them to transfer 2D shapes to 3D! The children will even investigate money and trade using the special coin bricks. Most importantly, the lessons will enable children to become problem solvers, enhancing their creativity as they work together to build and role-play!

### How are the learning objectives achieved?

Throughout the lessons, strategic questions will guide children through the process of applying math skills. Furthermore, the LEGO® DUPLO® building activities will reinforce creativity, inquiry, and exploration.

Refer to the table of contents for a brief description of lesson topics. Each lesson is labeled as *beginner*, *intermediate*, or *advanced*, based on the skills and knowledge needed to complete the lesson. The Teacher Guide includes one Getting Started activity designed to introduce the children to the basic ways they will be using the Café+ set. Introducing this activity first will give the children a solid foundation for completing the other six lessons. Subsequent lessons may be selected and adapted according to what is most relevant and appropriate for the children.

### Appendix with Images

The appendix contains printable images. Some of these can be used to extend the lessons and to help demonstrate children's ability to transfer what they have learned.

The appendix also includes inspiration photos of lesson-related models. The inspiration photos can be used to help the children connect with the lesson, and may also be used as part of the activities or as building inspiration when they are constructing their own models.

### Customizing to Your Class Needs

The Café+ lessons can be tailored to your needs and the needs of your class. One Café+ set can be used with up to six children at a time, working in pairs. Children need a lot of practice before becoming proficient at building with a partner, and this is a good way to promote collaboration. If the children are ready, you may incorporate partner building in all of the activities.

The activities can be done in centers or stations around the classroom, or in small groups. Personalizing the scenarios and content to fit your classroom dynamics and physical setup will help the children connect with the lessons. For instance, referencing a café in your community could help the children make a connection to the café theme.

The Café+ set and Teacher Guide can be combined with any other LEGO® DUPLO® set for even more learning possibilities. Combining other DUPLO sets with the Café+ set will also provide more building opportunities.

Expect differentiated learning outcomes based on each child's existing knowledge, vocabulary, and experience. Children's verbal responses, models, and solutions will vary. Support the children's learning by adapting the discussion questions and making connections that are relevant to them.

## Lesson Structure

Each lesson is structured according to a natural learning flow called the *LEGO® Education 4C approach*, which promotes successful learning experiences. The Connect, Construct, and Contemplate phases, which are the first three phases of each lesson, can be done in one session. The Continue phase is more challenging and can be completed in a later session.

### Connect

During the Connect phase, discussions will spark children's curiosity and activate their existing knowledge while preparing them for a new learning experience.

### Construct

In this phase, the children will participate in a hands-on building activity. As their hands create models of people, places, objects, and ideas, their minds will organize and store new information related to these structures.

### Contemplate

During the Contemplate phase, children are given the opportunity to reflect on what they have done and to talk about and share insights they have gained during the Construct phase of the lesson. This phase encourages children to develop their problem-solving skills as well as techniques that are crucial for mathematics, and all areas of life!

### Continue

New challenges in this phase build upon the concepts learned previously in the lesson, providing an opportunity for children to apply their newly-acquired knowledge during extension activities. Because the children may not be ready to complete the Continue phase until they have repeatedly practiced the skills learned earlier in the lesson, this phase can be done during a later session.

### Did you notice?

The Mathematics guidelines from the National Association for the Education of Young Children (NAEYC) and HeadStart have been used to develop the Café+ lessons. Please refer to the learning grid for an overview of the learning values referenced throughout this Teacher Guide. The learning goals listed at the end of each lesson can be used to determine whether or not each child is developing the relevant early math skills. These bullet points target specific skills or pieces of information that are practiced or presented during each lesson.

