

# Kindergarten Math (based on Illustrative Mathematics)

## Kindergarten Math Lesson Plan

Goal	<ul style="list-style-type: none"><li>• The purpose of this lesson is for students to compare groups of objects with very different quantities.</li></ul>
National/State Standard(s)	<ul style="list-style-type: none"><li>• <b>K.CC:</b> Counting and Cardinality</li><li>• <b>K.CC.A.1:</b> Count to 100 by ones and by tens.</li><li>• <b>K.CC.A.3</b> Write numbers from 0 to 20. Represent a number of objects with a written numeral 0–20 (with 0 representing a count of no objects).</li><li>• <b>K.CC.B.5:</b> Count to answer “how many?” questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1–20, count out that many objects.</li><li>• <b>K.CC.C.6:</b> Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies. Include groups with up to ten objects</li></ul>
Objective	<ul style="list-style-type: none"><li>• Students will compare the number of objects in groups with quantities.</li><li>• Students will be able to visually tell which group has more objects.</li><li>• Students will match or count each group to compare.</li><li>• Students will make groups with more or fewer objects than a given group of objects.</li></ul>

Connection	<ul style="list-style-type: none"><li>● Verbally count the number sequence to 10 and show quantities on their fingers.</li><li>● Visually tell which group has more objects</li><li>● Students make a group that has more objects than the given group, the given group will have very few objects. Similarly, when asking them to make a group that has fewer objects than the given group, the given group will have many objects. This should allow students to create and compare the groups visually. In a future lesson, students will create groups with more or fewer objects than a given group when the quantities are closer, where it will be helpful for students to match or count the objects in each group.</li></ul>
Instructional Activities	<ul style="list-style-type: none"><li>● <i>Warm-up:</i> As students count they will model the correct number of fingers, The teacher will write numbers 1–10 as students count and put up their fingers.</li><li>● <i>Activity 1:</i> Give each group of students a bag of pattern blocks; identify if there are more orange squares or green triangles; express how they know; change bags and have students determine if there are fewer orange squares or green triangles</li><li>● <i>Activity 2:</i> Students will make a group with counters that has more than the group of orange squares; tell partner how many counters you have; tell partner how many orange squares you have; make a group with counters that has fewer than the group of green triangles; tell partner how many counters you have; tell partner how many green triangles you have</li></ul>

Assessments	<ul style="list-style-type: none"><li>● <b>Summative Assessment:</b> Say one number for each object.</li><li>● Answer how many without counting again.</li><li>● Answer how many about a group that has been rearranged without counting again.</li><li>● Use the structure of 5 (in 5-frames or fingers) to count on from 5 to tell how many.</li><li>● Compare the number of objects in groups.</li><li>● Make groups with more, fewer, or the same number of objects than a given group.</li></ul>
Instructional Materials	<ul style="list-style-type: none"><li>● Brown paper bag</li><li>● Counters</li><li>● Pattern blocks (orange squares and green triangles)</li><li>● Connecting cubes</li></ul>