LESSON PLAN

EVEN & ODD NUMBERS
GRADES K-2

SUMMARY

Students identify whether the number of objects in a group is even or odd. They write equations to show even numbers as the sum of two equal addends, such as 8 = 4 + 4.

COMMON CORE STANDARD(S)

2.OA.C.3 Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends.

DURATION

Two 45-minute classroom periods
Engage and Explore, Explain, Elaborate page 1—one 45-minute classroom period
Elaborate page 2, Evaluate—second 45-minute classroom period

MATERIALS

Counters (optional)

ENGAGE AND EXPLORE

Previously, students learned to count objects by 2s. In this lesson, students will extend this knowledge to identify these skip counting numbers as even numbers. Students will connect even numbers to groups that can be partitioned into two equal groups and groups that can be partitioned into pairs.
Start with counting by 2s. Ask students how to count to 20 by 2s. Have students count together. Remind students that when you count by 2s, each number you say is 2 more than the number before.

Then, present this word problem. You have 8 candies. You want to split the candies into two groups. You want to write an addition equation to represent this situation. To make sure students understand, model one way, such as splitting the candies into a group of 6 and a group of 2 and then writing the equation $2 + 6 = 8$. Ask students for other ways. Highlight the solution $4 + 4 = 8$. (If students don’t suggest this solution, suggest it yourself.) Point out that in this case, the two groups are equal. You can add the same number, 4, together twice to get 8.

Have students discuss and present other numbers that they could put in two equal groups. Support this exploration with counters or drawings, as needed. Tell students that numbers that can be split into two equal groups are called “even”. Numbers that cannot are called “odd.” They will learn how to identify even and odd numbers in today’s lesson.

**EXPLAIN**

**WATCH THE GENERATION GENIUS EVEN & ODD NUMBERS VIDEO AS A GROUP**
Facilitate a conversation using the Discussion Questions.

**ELABORATE**

Direct students to use their new understanding to complete the practice problem worksheets. Page 1 contains bare mathematical problems to solidify understanding of the process. Page 2 contains application problems for students to apply the process to solve real-world problems.

**EVALUATE**

Have students gather in groups of 2 or 4 to compare and discuss their answers to the problems. Allow students enough time to communicate with their peers about their process and their thinking. Encourage students to use correct mathematical language when discussing their process. Have each group choose two questions they want more information about, or they want to discuss as a class.

When groups are ready, take questions from students. Encourage groups to answer questions brought up by other groups.

Students can play the online Kahoot! quiz game located below the video. It provides downloadable scores at the end of the quiz game. Alternatively, you can use the paper quiz, or the exit ticket questions. All these resources are located below the video in the assessment section.