



STEM

Playing Osmo Numbers with Red/Yellow Counters

By Osmo and Houghton Mifflin Harcourt

Grades

Pre-K / K / 1st

Environment

Individual Station, groups of 2-3, or classroom with projector.

Materials

Osmo base + red / yellow counters
+ Osmo Numbers app + iPad
version 2 or later.

Objective

This lesson coincides with 3 levels of Osmo Numbers: Goldfish Gulf, Boxy Beach, and Rainbow Reef. As children build numbers using referent numbers, they find various ways to represent the numbers and develop strong number sense skills.

CCSS:

K.CC.2, K.CC.4, K.CC.5, K.OA.5,
K.NBT.1, 1.OA.3, 1.OA.4, 1.OA.5,
1.OA.6, 1.NBT.2b

Mathematical Practices:

MP.1, MP.2, MP.4, MP.5, MP.7



Activity

Set up Osmo station (s) and introduce the counter tiles to students; a red counter represents the number 5 and a yellow counter represents the number 1.



1. Open the Numbers app and go to the settings menu.
2. Click on the gear icon on the upper left of the game screen. Check at the bottom of the screen to make sure "Extra Input" is enabled.
3. Go to the main menu and locate the COUNT section.
4. Select the first level: Goldfish Gulf
5. Using the counters, students will create the numbers that they seen in the bubbles that are closest to the water on the screen.
6. As students build numbers correctly, the bubbles will pop and they will earn achievements and move to other levels with greater numbers. If they get stuck, they will get real-time feedback about their work at the bottom of the screen.
7. While the children are playing the game, discuss the strategies they use to make decisions. Promote discussion by asking "Why did you build the Numbers using those counters?" or "If you had built the number in a different way would your score be better or not? How do you know?"



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Playing Osmo Numbers with Red/Yellow Counters

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Grades

2nd / 3rd

Environment

Individual Station, groups of 2-3, or classroom with projector.

Materials

Osmo base + red / yellow counters
+ Osmo Numbers app + iPad
version 2 or later.

Objective

This lesson coincides with the following levels of Numbers game: Blenny Bay, Clownfish Coast, Betta Bluff, Butterfly Beach, Seahorse Strait. As children build numbers using referent numbers, they find various ways to represent the numbers and develop strong number skills.

CCSS:

2. OA.2

Mathematical Practices:

MP.1, MP.2, MP.4, MP.5, MP.7



Activity

Setup Osmo station (s) and introduce the counter tiles to students: a red counter represents the number 5 and a yellow counter represents the number 1.



1. Open the Numbers app and go to the settings menu.
2. Click on the gear icon on the upper left of the game screen. Check at the bottom of the screen to make sure "Extra Input" is enabled.
3. Go to the main menu and locate the COUNT section.
4. Select the fourth level: Blenny Bay
5. Using the counters, children will build Numbers 14 through 24 that they see in the bubbles closest to the water on the screen.
6. As students build Numbers correctly, the bubbles will pop and they will earn achievements and move to the other levels with greater numbers. As an aide, they will get real-time feedback about their work at the bottom of the screen.
7. While the children are playing the game, discuss the strategies they use to make decisions. Promote discussion by asking "Why did you build the Numbers using those counters?" or "If you had built the number in a different way would your score be better or not? How do you know?"