

Introduction to Place Value

By: School:

What Student Will Need:

Computer, phone, or any device with internet access

An account in the self-directed learning resource, connected to me as the teacher An account in the communication resource, connected to me as the teacher

PDF Handout (created from this lesson form)

Lesson Objective:

Students will learn that order matters in numbers because of the value of the place each digit is in. They will also learn the importance of having zero as a place holder. They will learn the basic idea of base ten place value.

Details:

I will put these lesson pdfs in Google Docs folder that is shared with my students. I will have color-coded three folders for the lessons that have additional scaffolding, the standard lesson, and the lesson that includes enrichment. All students will be encouraged to take a copy of the lesson that includes the deep dive if they are interested in being more challenged.

I will have students respond to a prompt in Flipgrid after viewing the lesson video. This will allow me to give them some personal feedback and communication. I will ask them to either tell why zero is an important number, or to give some examples of when order matters and when it doesn't.

Review:

Review Content

This video will tell you some important ideas that will help you understand place value. Youtube version

Lesson Flow:

Lesson Content

Not mentioned here, but knowing when orientation matters and when it does not is also important and you might want to note that. For example, a chair does not change what it is if you face it another direction. But, a 3 becomes an E if it faces another direction. Order and orientation mattering or not are fundamental concepts that are important for students to understand.

The idea of place value and base ten is introduced.

Youtube Version

Instructions for Student:

Watch the presentation.

Self-Directed Resource

Students should be logged in to their Khan Academy accounts when they do this so that the data is saved. This lesson has them add either 1 or 10 to a number. This gives them practice with the role of 0, and paying attention to the place value when they add. Adding 1 is very simple, so the focus is on which place value to add the 1 to.

Instructions for Student:

Log in to your Khan Academy account and complete the work.



Communication With Student

The students need to have accounts in FlipGrid so that their data is saved, and you can give them feedback. You will be able to select a few of the video responses of the students to share with the class. You can look at this using student ID "12345". My prompt is:

Answer either A or B:

- A. Give an example of something where order matters and something where it does not.
- B. Why is the number 0 so important? Give an example of what might happen without it.

Instructions for Student:

Answer one of the prompts.

Type "12345" to access.

Additional Support

Instructions for Student:

Click the link and complete the activities to practice thinking about the value of each number.

Deep Dive/Challenge

Instructions for Student:

Click the link to see a deeper dive of a discussion about place value. It is kind of cool.

Then see if you can do these. If you don't remember which way greater than signs work, click the link at the bottom.

https://www.khanacademy.org/math/cc-2nd-grade-math/cc-2nd-place-value/cc-2nd-three-digit-compare/e/comparing-numbers-within-1000?modal=1

That link is extra if you want to train your brain.

Collaborate with Teachers:

Collaboration with Teachers

We will share lessons in our PLCs. We will all need different flipgrid links for our classes, unless we share on big flipgrid account that we all have access to.

Click the link to enter the Edstar Analytics math teacher PLC. Ask for an account if you don't have one.

Assessment Tool:

Assessment Tool

This is an early math place value test in Khan Academy.

Additional Links:

Gater Eats Greater

Youtube Version

