

General Information

Lesson Parts & Duration

Total Duration: 1 hour

- Digits and Their “Place” Value

Subject(s)

- Place Value Through the 100s Place (2.NBT.1)

Objective

- Students will understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones.
- Students will understand the following as special cases:
 - 100 can be thought of as a bundle of ten tens - called one “hundred”.
 - The numbers 100, 200, 300, 400, 500, 600, 70, 800, 900 refer to one, two, three, four, five, six, seven, eight, nine hundreds (and zero tens and zero ones).
- Students will correctly identify two-digit and three-digit numbers on a place value chart, indicating which digit represents which value (hundreds, tens, ones).
- Students will identify a two-digit or three-digit number correctly based on verbal descriptions using place value terms (i.e., *one group of ten and 1 one, 11 ones, or the digit 1 in the tens place and the digit 1 in the ones place*).

Materials

- lined paper (1 per student)
- pencil
- document camera or whiteboard
- **Optional:** equity sticks (sticks that have either student names or numbers on them to ensure you are calling on students fairly).
- **Optional:** printable “Exit Slip” (page 6)
- **Optional:** printable “Break Up Your Day” brain/movement break ideas (page 8)

Protocols (page 7)

- Used throughout lesson - be familiar with each protocol.
- Place Protocols under a document camera (if available) as necessary throughout the lesson.

Instructional Setting

- Students seated with or near another student for partner work

Throughout this lesson, you will find:

- ☀ **Scripted Text** indicates things that need to be said directly. Bullets starting with a “T” followed by *italicized type* indicate scripted text
- ☀ **Clarifiers** within scripted text are in **orange**
- ☀ **Teacher Directions** indicate things you should be doing
- ☀ **Side notes** provide helpful hints, ELL strategies, differentiation and information
- ☀ **Break Up Your Day** (Brain/Movement Breaks) are in green boxes (at the end)

Remember!

Quality over quantity. All components do not have to be accomplished; lessons may be ended at any time and resumed later.

Instructional Plan: 60 minutes

Pass out one piece of lined paper per student.

Setting Up Your Paper

- T* Write your name and date in the top right hand corner of your paper. See example & model so students can follow.
- T* On the first line please write, "I will write two and three-digit numbers in a place value chart in the correct placement."

Either write this on the board for the students to copy or project with document camera. Give students time to write.

Model for students how to draw a "Place Value Chart" on their paper.

- T* Now we are going to draw a place value chart on our papers.
- T* Draw one straight horizontal line straight across your paper, like you are underlining something. Model this step for students to follow.
- T* Next, we will draw two vertical lines.
- T* Vertical means straight up and down.
- T* We are dividing our line into 3 equal parts. Model this step for students to follow.
- T* Last, we need to label our place value chart.
- T* The first column we will label hundreds, for the hundred's place.
- T* The second or center column we will label tens, for the ten's place.
- T* And the third and last column we will label ones, for the one's place.

Note:

It is very important for you to walk around the room between each step that the students need to draw or write and check student work while waiting for them to finish.

- T* The first number you are to write on your chart, and please write your number exactly below the line of the place value space, is eighty-nine. Write the number 89 on the board, NOT on your chart so students can attempt correct placement of digits independently.
- T* The number eighty-nine is a two-digit number.
- T* If I read it in place value, it reads "eight groups of ten and nine ones".
- T* Reading it this way helps me understand how to write it on the chart.

Write the number 8 under the tens and 9 under the ones.

- T* Hold up your paper if this is how you wrote it.
- T* If you did not write it this way, take a moment to place your numbers correctly.
- T* Okay.
- T* Now, draw a straight line from left side of your paper to right on your chart under the number 89.
- T* We will be drawing a line like this after each number you write.

Name _____
Date _____

I will write two and three digit numbers in a place value t-chart in the correct placement.

Name _____
Date _____

I will write two and three digit numbers in a place value t-chart in the correct placement.

hundreds	tens	ones

- T** I'm going to read a list of numbers and I want you to write them in the correct place value on your chart.
- T** Please write the number 12, or "1 group of ten and 2 ones". Write the number 12 on the board, NOT on your chart so students can attempt correct placement of digits independently.
- T** The next number is 57, or "5 groups of ten and 7 ones". Write the number 57 on the board, NOT on your chart so students can attempt correct placement of digits independently.
- T** Now please write 35 Write the number 35 on the board, NOT on your chart so students can attempt correct placement of digits independently.
- T** Class, how do we say this number in place value? Listen for accuracy. Answer: 3 groups of ten and 5 ones
- T** Next number, 48. Write the number 48 on the board, NOT on your chart so students can attempt correct placement of digits independently.
- T** 125, or "1 group of one hundred, 2 groups of tens and 5 ones" Write the number 125 on the board, NOT on your chart so students can attempt correct placement of digits independently.
- T** For our last five numbers, you need to be a very good listener.
- T** I will not be writing these numbers on the board after I say them.
- T** Our first challenge number is... 231. For the remainder of problems do not write the number them on the board.
- T** Our second challenge number is... 798.
- T** Our third challenge number is... 673.
- T** Our fourth challenge number is... 111.
- T** Be careful, this one is tricky!
- T** Okay, the big finale! 999.
- T** Okay, let's check our work with a partner.
- T** While you check over your work with your buddy you may make changes to your own answers if you discover you have written an answer wrong.
- T** But remember, just because your buddy has a different answer doesn't mean their answer is correct.
- T** If you have different answers, please have a discussion and justify your answer by telling why you wrote what you wrote.
- T** Then hopefully you and your buddy can agree on an answer.

Note:

While reading the numbers, pause and scan the room for on-task behavior. Circulate the room while reading so that you can redirect off-task students. Proximity is very effective!

Ask, Answer, and Justify

- Put students in pairs: have them assign themselves a number 1 or 2
- Roles for number assignments:
 - 1's will ask the question first and 2's will respond
 - Then 2's will ask the question and 1's will respond

Using **Ask, Answer, and Justify** have students get a partner to check their answers. Then bring the class back together as a whole to go over the correct answers.

- T** Take turns asking each other how they wrote each answer.
- T** As a challenge have your partner tell you how we say the number in place value terms.
- T** Let me show you an example of what I mean.
- T** If you were my partner talk to a specific student who is near you I would start by saying how did you write the number 12?
- T** Then you would respond, "I wrote the number 12 as the digit 1 in the tens place and the digit 2 in the ones place."
- T** For a challenge, I can also ask you, "how do you say the number 12 in place value terms?"
- T** Then you would respond with, "1 group of ten and 2 ones".
- T** When I say "Place", you say "Value" and 1's can begin.
- T** Place! Students respond, "Value" and begin.

Write the following sentence frames on the board for students to use as a model during this activity.

Question:

How did you write the number _____?

Answers:

I wrote the number _____ as the digit _____ in the **tens place** and the digit _____ in the **ones place**.

OR

I wrote the number _____ as the digit _____ in the **hundreds place**, the digit _____ in the **tens place**, and the digit _____ in the **ones place**.

Challenge:

Question:

How did you write the number _____ in place value terms?

Answer:

_____ group(s) of ten and _____ ones.

OR

_____ group(s) of hundreds _____ group(s) of ten and _____ ones.

Note:

While reading the numbers, pause and scan the room for on-task behavior. Circulate the room while reading so that you can redirect off-task students. Proximity is very effective!

You may use the exit slip at the end of this lesson as a quick assessment of student understanding. Either print them out (page 6), or simply have students copy the problems on a half sheet of paper. (Answer Key on next page)

Name: ___ **ANSWER KEY** ___ Date: _____

Exit Slip:
Digits and Their Value

(ANSWERS WILL VARY)

1. Write any **2-digit number**. **SAMPLE ANSWER: 23**
2. **Fill in the sentence frames:**
 - a. I can write the number **23** as the digit **2** in the **tens place** and the digit **3** in the **ones place**.
 - b. **2** groups of ten and **3** ones.
3. Write any **3-digit number**. **SAMPLE ANSWER: 578**
4. **Fill in the sentence frames:**
 - a. I can write the number **578** as the digit **5** in the **hundreds place**, the digit **7** in the **tens place**, and the digit **8** in the **ones place**.
 - b. **5** groups of hundreds **7** groups of ten and **8** ones.

At the end of the exercise, teacher collects papers and paper clips them together. This is the final product.

 **Make sure to “Break Up Your Day!”** 

Now is a great time to take a break and get students re-energized.
See our list of engaging movement and brain break ideas to get your students moving and ready to refocus! (see page 8)

Name: _____ Date: _____

Exit Slip:
Digits and Their Value

5. Write any **2-digit number**. _____
6. **Fill in the sentence frames:**
 - a. I can write the number _____ as the digit _____ in the **tens place** and the digit _____ in the **ones place**.
 - b. _____ groups of ten and _____ ones.
7. Write any **3-digit number**. _____
8. **Fill in the sentence frames:**
 - a. I can write the number _____ as the digit _____ in the **hundreds place**, the digit _____ in the **tens place**, and the digit _____ in the **ones place**.
 - b. _____ groups of hundreds _____ groups of ten and _____ ones.

Name: _____ Date: _____

Exit Slip:
Digits and Their Value

1. Write any **2-digit number**. _____
2. **Fill in the sentence frames:**
 - a. I can write the number _____ as the digit _____ in the **tens place** and the digit _____ in the **ones place**.
 - b. _____ groups of ten and _____ ones.
3. Write any **3-digit number**. _____
4. **Fill in the sentence frames:**
 - a. I can write the number _____ as the digit _____ in the **hundreds place**, the digit _____ in the **tens place**, and the digit _____ in the **ones place**.
 - b. _____ groups of hundreds _____ groups of ten and _____ ones.



Protocols:

Ask and Justify

- Put students in pairs: have them assign themselves a number 1 or 2
- Roles for number assignments:
 - 1's will ask the question first and 2's will respond
 - Then 2's will ask the question and 1's will respond
 - The next time 2's ask the question first

On your feet/ Get ready to meet/ Go and Greet (should take less than one minute)

- Students stand up and put their hand up in the air
- Students find another student that has their hand up to have a “new” partner (and get them moving around)
- Once they are with their new partner, they put their hands down and face the teacher

Give one & Get one

- Students share information in Ask & Justify
- Each student in the pair writes down the information shared by their partner
- If the information is already written, a check is put by the information

Back to Back and Face to Face

- When in pairs, direct students to stand back to back
- Ask the students to consider the question
- Give students at least a minute to consider their response
- Have them turn face to face
- Follow the protocol for Ask and Justify

Share out and check for understanding

- Follow the protocol for Ask and Justify
- Ask students to share their response to the question
- Verify that response or conclusion is correct
- If needed, provide clarification

(Used throughout lesson - be familiar with each protocol.)

Note: Place Protocols under a document camera (if available) as necessary throughout the lessons

Make sure to “Break Up Your Day!”

These can be used in the middle of a lesson or at the end of your lesson.

Here are a few engaging movement and brain break ideas to get your students moving and ready to refocus!



Break Up Your Day: You’re Out of Order!



- Students buddy up and say 3 single-digit numbers out loud.
- The second buddy must repeat the numbers backwards!
- Reverse roles.
- Repeat three times. (example: Buddy 1 says, “My numbers are 5, 3, 6, Buddy 2 says, “Your numbers were 6, 3, 5.”)



Break Up Your Day: Guess My Number!



- Teacher thinks of a multiple digit number.
- The students will take turns asking yes or no questions to try and figure out the number, can use equity cards to call on students to ask questions.
- (Example: does the number have three digits, is the number in the tens place greater than 2).
- Providing paper and pencils for students to write down guesses can be helpful.)



Break Up Your Day: Body Stretches!



FORMATION: Standing at desks

EQUIPMENT: None

RULES/DIRECTIONS:

- Have students begin the day with a series of simple activities lasting 30 seconds or more: Jumping jacks, Knee lifts, Flap arms like a bird, Hopping Scissors (feet apart then cross in front, feet apart then cross in back)
- Follow each activity with a basic stretching movement: Reach for the sky, Runner’s stretch, Butterfly stretch (sit with bottom of feet together), Knee to chest, Rotate ankles, Scratch your back
- Hold stretches for 10 - 30 seconds.
- Repeat a different simple activity followed by a new basic stretch as many times as desired.