

# K Math Unit 10: Numbers 16 to 19

Content Area: **Mathematics**  
Course(s):  
Time Period: **Marking Period 3**  
Length: **10 days**  
Status: **Published**

## Unit Overview

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### Numbers 16 to 19

The focus of this unit is:

- to represent the group using physical manipulatives and a numeral
- to compose or decompose numbers 16 to 19 into ten ones and some more ones
- to compose and decompose numbers develops critical thinking skills, as students develop the ability to visualize numbers of objects

### What Students Are Learning

- Students write numbers from 16-19
- Students learn how to represent numbers from 16 to 19
- Students compose and decompose numbers from 16 to 19

### Number Routines

- What Did You See?
- Break Apart
- Notice and Wonder
- Notice and Wonder: How are they the same? How are they different?
- Notice and Wonder: What question could you ask?

## Standards

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MATH.K.CC.A.3	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).
MATH.K.NBT.A.1	Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (e.g., $18 = 10 + 8$ ); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.

## Materials

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### Core Materials:

**Reveal Math**

- 10.1 Represent 16 and 17
- 10.2 Make 16 and 17
- 10.3 Decompose 116 and 17
- 10.4 Represent 18 and 19
- 10.5 Make 18 and 19
- 10.6 Decompose 19 and 19

### Supplemental Materials:

- [ST Math](#)
- [Happy Numbers](#)
- [3 Act Lessons](#)
- [Building Fact Fluency Kit](#)
- [Brainiaccamp Manipulatives](#)
- [Nearpod Lessons](#)
- [Brainpop Resources](#)
- [Online Resources](#)

## Technology

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CS.K-2.8.1.2.AP.1	Model daily processes by creating and following algorithms to complete tasks.
CS.K-2.8.1.2.AP.2	Model the way programs store and manipulate data by using numbers or other symbols to represent information.
CS.K-2.8.1.2.AP.4	Break down a task into a sequence of steps.
CS.K-2.8.1.2.DA.1	Collect and present data, including climate change data, in various visual formats.
CS.K-2.8.1.2.DA.4	Make predictions based on data using charts or graphs.
CS.K-2.8.2.2.ED.2	Collaborate to solve a simple problem, or to illustrate how to build a product using the design process.

## Assessment

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### Formative Assessment

- Unit Readiness Diagnostics
- Lesson Checks
- Exit Tickets
- Teacher Observation

### Summative Assessment

- Unit Assessment Performance Task
- Benchmark Tests
- Alternative Assessments: Performance Tasks & Projects

## Accommodations & Modifications

### Special Education

Differentiated Instruction			
Accommodate Based on Students' Individual Needs: Strategies			
<p><b>Time/General</b></p> <ul style="list-style-type: none"> <li>• Extra time for assigned tasks</li> <li>• Adjust length of assignment</li> <li>• Timeline with due dates for reports and projects</li> <li>• Communication system between home and school</li> <li>• Provide lecture notes/outline</li> </ul>	<p><b>Processing</b></p> <ul style="list-style-type: none"> <li>• Extra response time</li> <li>• Have students verbalize steps</li> <li>• Repeat, clarify, or reword directions</li> <li>• Mini-breaks between tasks</li> <li>• Provide a warning for transitions</li> <li>• Reading partners</li> </ul>	<p><b>Comprehension</b></p> <ul style="list-style-type: none"> <li>• Precise step-by-step directions</li> <li>• Short manageable tasks</li> <li>• Brief and concrete directions</li> <li>• Provide immediate feedback</li> <li>• Small group instruction</li> <li>• Emphasize multi-sensory learning</li> </ul>	<p><b>Recall</b></p> <ul style="list-style-type: none"> <li>• Teacher-made checklist</li> <li>• Use visual graphic organizers</li> <li>• Reference resources to promote independence</li> <li>• Visual and verbal reminders</li> <li>• Graphic organizers</li> </ul>
<p><b>Assistive Technology</b></p> <ul style="list-style-type: none"> <li>• Computer/whiteboard</li> <li>• Tape recorder</li> <li>• Spell-checker</li> <li>• Audio-taped books</li> </ul>	<p><b>Tests/Quizzes/Grading</b></p> <ul style="list-style-type: none"> <li>• Extended time</li> <li>• Study guides</li> <li>• Focused/chunked tests</li> <li>• Read directions aloud</li> </ul>	<p><b>Behavior/Attention</b></p> <ul style="list-style-type: none"> <li>• Consistent daily structured routine</li> <li>• Simple and clear classroom rules</li> <li>• Frequent feedback</li> </ul>	<p><b>Organization</b></p> <ul style="list-style-type: none"> <li>• Individual daily planner</li> <li>• Display a written agenda</li> <li>• Note-taking assistance</li> <li>• Color code materials</li> </ul>

## 504

- In class/pull out support with special ed teacher Additional time during intervention time
- Preferred seating
- Questions read aloud
- Extended time for completing tasks Graphic organizers
- Vocabulary support Mnemonic devices
- Songs/videos to reinforce concepts Limit number of questions
- Scribe Manipulatives Calculators Reteach pages Leveled homework
- Lesson intervention activities
- Math Diagnosis & Intervention System Another look homework video
- Practice buddy

## ELL

- Translation device/dictionary
- In class/pull out support with ESL teacher
- Preferred seating
- Questions read aloud
- Extended time for completing tasks
- Graphic organizers
- Vocabulary support
- Mnemonic devices
- Songs/videos to reinforce concepts
- Manipulatives

## At-risk of Failure

- Additional support during intervention time
- Questions read aloud
- Graphic organizers
- Vocabulary support
- Mnemonic devices
- Songs/videos to reinforce concepts
- Manipulatives
- Calculators
- Reteach pages
- Leveled homework
- Lesson intervention activities

## Gifted & Talented

- Independent projects
- [Open middle](#)
- Websketch explorations
- Stem projects
- Enrichment pages

- Online games
- Leveled Homework
- Extension Activities

## **Interdisciplinary Connections**

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### **ELA:**

RI.2.10. Read and comprehend informational texts, including history/social studies, science, and technical texts, at grade level text complexity proficiently with scaffolding as needed.

### **Science:**

K-2-ETS1-2. Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.

## **Career Readiness, Life Literacies & Key Skills**

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**Creativity and Innovation:** Brainstorming can create new, innovative ideas.

- 9.4.2.CI.1: Demonstrate openness to new ideas and perspectives (e.g., 1.1.2.CR1a, 2.1.2.EH.1, 6.1.2.CivicsCM.2).

**Example:** Students will share ideas of multiple strategies and draw models to illustrate the solution path they utilize to solve the word problem.

**Critical Thinking and Problem-Solving:** Critical thinkers must first identify a problem then develop a plan to address it to effectively solve the

problem.

- 9.4.2.CT.2: Identify possible approaches and resources to execute a plan (e.g., 1.2.2.CR1b, 8.2.2.ED.3).

**Example:** Students will work in small groups and collaborate to identify possible solutions paths to word problems, utilizing the strategies they have learned to solve addition and subtraction operations, such as place value charts, number lines, hundred charts, ten frames, etc. that could best illustrate the solution to the problem.

**Digital Citizenship:** Individuals should practice safe behaviors when using the Internet.

- 9.4.2.DC.3: Explain how to be safe online and follow safe practices when using the Internet (e.g., 8.1.2.NI.3, 8.1.2.NI.4).

**Example:** Students will model appropriate use of all digital platforms and share examples of their work that exhibit proper use of

various platforms.

**Interaction of Technology and Humans:** Technology has changed the way people live and work. Various tools can improve daily tasks and quality of life.

- 8.2.2.ITH.3: Identify how technology impacts or improves life.

**Example:** Students will track their progress using Imagine Math or other math programs often utilized in class. Students will discuss the pros and cons of using the program with the teacher.

## **Career Ready Practices**

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STEM Career: Aerospace Engineer- Students talk about the work of Aerospace Engineers.

Students count seat on a plane to see how many passengers a plane can hold.

- CRP1. Act as a responsible and contributing citizen and employee.
- CRP2. Apply appropriate academic and technical skills.
- CRP4. Communicate clearly and effectively and with reason.
- CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.
- CRP12. Work productively in teams while using cultural global competence.