

2 Math Unit 03: Patterns within Numbers

Content Area: **Mathematics**
Course(s):
Time Period: **Marking Period 1**
Length: **12 days**
Status: **Published**

Unit Overview

Recognizing Number Patterns

The unit begins by reviewing counting by 1s. Number charts are used to allow students to explore each hundred set between 100 and 1,000. Then the students will identify patterns when skip counting by 5s, 10s, and 100s. These patterns are used to solve problems when counting on by 5s, 10s, or 100s. Finally, students explore the idea of even and odd numbers.

What Students Are Learning

- Students describe and use patterns when counting by 1s and skip counting by 5s, 10s, and 100s within 1,000.
- Students determine whether a number is even or odd.
- Students write an equation to express an even number as a sum of two equal addends.
- Students use arrays to find the sum of equal addends.

Number Routines

- Mystery Number
- Let's Count
- Which Benchmark Is It Closest To?
- Where Does It Go?
- Notice & Wonder
- Which Doesn't Belong?
- Numberless Word Problem

Standards

MATH.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.
MATH.2.OA.C.4	Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.
MATH.2.NBT.A.2	Count within 1000; skip-count by 5s, 10s, and 100s.

Materials

Core Materials:

Reveal Math

3.1 Counting Patterns

3.2 Patterns When Skip Counting by 5s

3.3 Patterns When Skip Counting by 10s and 100s

3.4 Understand Even and Odd Numbers

3.5 Addition Patterns

3.6 Patterns With Arrays

3.7 Use Arrays to Add

Supplemental Materials:

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

Technology

CS.K-2.8.1.2.CS.1	Select and operate computing devices that perform a variety of tasks accurately and quickly based on user needs and preferences.
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.3	Identify and describe patterns in data visualizations.
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.
CS.K-2.8.2.2.ED.3	Select and use appropriate tools and materials to build a product using the design process.
CS.K-2.DA	Data & Analysis

Assessment

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>Time/General</p> <ul style="list-style-type: none"> • Extra time for assigned tasks • Adjust length of assignment • Timeline with due dates for reports and projects • Communication system between home and school • Provide lecture notes/outline 	<p>Processing</p> <ul style="list-style-type: none"> • Extra response time • Have students verbalize steps • Repeat, clarify, or reword directions • Mini-breaks between tasks • Provide a warning for transitions • Reading partners 	<p>Comprehension</p> <ul style="list-style-type: none"> • Precise step-by-step directions • Short manageable tasks • Brief and concrete directions • Provide immediate feedback • Small group instruction • Emphasize multi-sensory learning 	<p>Recall</p> <ul style="list-style-type: none"> • Teacher-made checklist • Use visual graphic organizers • Reference resources to promote independence • Visual and verbal reminders • Graphic organizers
<p>Assistive Technology</p> <ul style="list-style-type: none"> • Computer/whiteboard 	<p>Tests/Quizzes/Grading</p> <ul style="list-style-type: none"> • Extended time 	<p>Behavior/Attention</p> <ul style="list-style-type: none"> • Consistent 	<p>Organization</p> <ul style="list-style-type: none"> • Individual

<ul style="list-style-type: none"> • Tape recorder • Spell-checker • Audio-taped books 	<ul style="list-style-type: none"> • Study guides • Focused/chunked tests • Read directions aloud 	<p>daily structured routine</p> <ul style="list-style-type: none"> • Simple and clear classroom rules • Frequent feedback 	<p>daily planner</p> <ul style="list-style-type: none"> • Display a written agenda • Note-taking assistance • Color code materials
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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
- Math Diagnosis & Intervention System

At-risk of Failure

- Additional time 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
- Math Diagnosis & Intervention System
- Another look homework video
- Practice buddy

Gifted & Talented

- Independent projects
- Enrichment pages
- Online games
- Leveled Homework
- Extension Activities
- Today's Challenge

Interdisciplinary Connections

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.

HE.K-2.2.2.2.PF

Physical Fitness

Career Readiness, Life Literacies & Key Skills

PFL.9.1.2.CR.1

Recognize ways to volunteer in the classroom, school and community.

PFL.9.1.2. FI.1

Differentiate the various forms of money and how they are used (e.g., coins, bills, checks, debit and credit cards).

WRK.9.1.2.CAP.1

Make a list of different types of jobs and describe the skills associated with each job.

WRK.9.1.2.CAP.2

Explain why employers are willing to pay individuals to work.

TECH.9.4.2.CT

Critical Thinking and Problem-solving

Career Ready Practices

- - **Stem in Action : Stem Career: paramedic.**
 - **Marrisol talks about the work of a paramedic.**
 - **Marrisol counts by 100s to find the number of bandages.**
- 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.