BOE Approved 8/18

Cliffside Park Public Schools Grade 1

Mathematics

Topic Name: Topic 16: Step Up to 2nd Grade

Resource: enVision Math 2.0, Pearson, 2016

Duration: June: (Finnish) Topic 16: 10 days

Enduring Understandings

Topic 16

- Numbers can be classified as even or odd by showing numbers as two equal parts.
- An array shows equal groups, so you can write equations, using repeated addition, to find the total number of objects in an array.
- Patterns on a hundred chart can be used to add numbers and to develop mental math strategies and number sense.
- The ones are added first and then the tens.
- Patterns in a hundred chart are useful for subtracting numbers and for developing mental math strategies and number sense.
- You can use pencil and paper to subtract and to record the regrouping in the tens and ones places.
- Time can be told to the nearest 5 minutes.
- Three digit numbers are made up of hundreds, tens, and ones.
- Whenever there are 10 in one place value, you move to the next greater place value.
- Place value patterns and number lines can be used to help you skip count by 5's, 10's and 100's.

Essential Questions
Topic 16

- How can I apply what I learned to future math concepts?

Focus of Standards

BOE Approved 8/18

Cliffside Park Public Schools Grade 1

Student Outcomes Topic 16	Skills	Assessments	Resources
• I can tell if a group of objects is even or odd. • I can find the total number of objects in a set of rows and columns. • I can add two-digit numbers to two-digit numbers using a hundred chart. • I can use models to add 2 two-digit numbers and then explain my work. • I can subtract two-digit numbers using a hundred chart. • I can use a model to subtract a 1-digit number from a 2-digit number. • I can tell time to the nearest 5 minutes. • I can understand place value and count by hundreds to 1000. • I can count different types of place-value blocks to determine the number being shown. • I can skip count by 5, 10, and 100 using a number line.	• Solving problems • Understanding concepts • Reasoning	**Formative** • Diagnostic assessment • Exit tickets • Round robin group work • Analysis of homework • Class polls ○ Show of hands: 1 for all set, 2 for just ok, 3 for help • One thing I learned/One thing I need work on **Summative** • End topic tests • Post group topic • EOY tests • SGO tests **Benchmark** • Diagnostic Assessment • Pearson benchmark tests **Alternative**	**Texts** • enVision math 2.0 **Digital** • Student/Teacher eText • Interactive math story • Home-school connection **Classroom Math Materials** • Connecting cubes • Counters • Hundred chart • Cube trains • Demonstration clock • Analog clock • Digital clock • Place-value blocks

		• Math diagnosis and intervention system 2.0 • Reteaching Set • Online Learning ○ Games • Higher Order Thinking Problems • Leveled homework and practice • Center games • One on one conferencing	

Vocabulary
Topic 16
hundreds, thousand, hundred, digits

NJ Student Learning Standards: Math

Operations and Algebraic Thinking
2.OA.B.2 Add and subtract within 20. Fluently add and subtract within 20 using mental strategies.2 By end of Grade 2, know from memory all sums of two one-digit numbers.
2.OA.C.4 Work with equal groups of objects to gain foundations for multiplication. 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.
Numbers and Operations in Base Ten
2.NBT.B.5 Use place value understanding and properties of operations to add and subtract. Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.
2.NBT.2.9 Explain why addition and subtraction strategies work, using place value and the properties of operations.[3]
[3]Explanations may be supported by drawings or objects.

Measurement and Data
2.MD.C.7 Work with time and money. Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.

Number and Operations in Base Ten

2.NBT.A.2 Understand place value. Count within 1000; skip-count by 5s, 10s, and 100s.

2.NBT.A.1 Understand place value. Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases: a. 100 can be thought of as a bundle of ten tens — called a "hundred." b. The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).

Standards for Mathematical Practice

MP1. Make sense of problems and persevere in solving them.
MP2. Reason abstractly and quantitatively.
MP3. Construct viable arguments and critique the reasoning of others.
MP4. Model with mathematics.
MP5. Use appropriate tools strategically.
MP6. Attend to precision.
MP7. Look for and make use of structure.
MP8. Look for and express regularity in repeated reasoning.

Career Ready Practices

CRP1. Act as a responsible and contributing citizen and employee.
CRP2. Apply appropriate academic and technical skills.
CRP3. Attend to personal health and financial well-being.
CRP4. Communicate clearly and effectively and with reason.
CRP5. Consider the environmental, social and economic impacts of decisions.
CRP6. Demonstrate creativity and innovation.
CRP7. Employ valid and reliable research strategies.
CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.
CRP9. Model integrity, ethical leadership and effective management.
CRP10. Plan education and career paths aligned to personal goals.
CRP11. Use technology to enhance productivity.
CRP12. Work productively in teams while using cultural global competence.

Cliffside Park Public Schools Grade 1

NJSLS Technology Standards
8.1 Educational Technology
E: Research and Information Fluency: Students apply digital tools to gather, evaluate, and use information.
8.1.2.E.1 Use digital tools and online resources to explore a problem or issue.
8.2 Technology Education, Engineering, Design, and Computational Thinking
E. Computational Thinking: Programming: Computational thinking builds and enhances problem solving, allowing students to move beyond using knowledge to creating knowledge.
8.2.2.E.1 List and demonstrate the steps to an everyday task.

Interdisciplinary Connections
NJSLS for ELA and Science are introduced, developed, and practiced in the context of learning math content and engaging in mathematical practices.
ELA

- NJSLSA.R7. Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.
- RI.1.3. Describe the connection between two individuals, events, ideas, or pieces of information in a text.
- RI.1.4. Ask and answer questions to help determine or clarify the meaning of words and phrases in a text.

Science

- 1-PS4-1 Scientists use different ways to study the world.
- 1-LS1-2 Scientists look for patterns and order when making observations about the world.

NJSLS: 21st Century Life and Careers
Key Subjects and 21st Century: Themes Mastery of key subjects and 21st century themes is essential to student success. Key subjects include English, reading or language arts, world languages, arts, mathematics, economics, science, geography, history, government and civics. In addition, schools must promote an understanding of academic content at much higher levels by weaving 21st century interdisciplinary themes into key subjects:

Cliffside Park Public Schools Grade 1

- Global Awareness
- Financial, Economic, Business and Entrepreneurial Literacy

9.1.4.A.2 Identify potential sources of income
9.1.4.C.5 Determine the relationship among income, expense and interest
9.1.4.D.2 Explain what it means to “invest”.

Cliffside Park Public Schools Grade 1

Integrated Differentiation/Accommodations/Modifications *(Alternate Modes of Instruction and Support)*		
Modifications to Support Gifted and Talented Students	**Modifications to Support English Language Learners**	**Modifications to Support Our Learners (Students with IEPs/504s and At-Risk Learners**
Provide appropriate challenge for wide ranging skills and development areas. Participate in inquiry and project-based learning units of study Assigning roles within partnerships Differentiated supports: content, process, product, environment	Native Language Translation (peer, online assistive technology, translation device, bilingual dictionary) Pair visual prompts with verbal presentations Front Load and immerse students in literacy and language experiences related to content Provide students with visual models, sentence stems, concrete objects, and hands-on materials. Model procedures for life skills. Collaboration between ELL and general education teacher to maximize learning	Review student individual educational plan and/or 504 plan. Establish procedures for accommodations and modifications for assessments as per IEP/504. Establish procedures for modification of classwork and homework as per IEP/504. Modify classroom environment to support academic and physical needs of the students as per IEP/504. Provide appropriate accommodations, instructional adaptations, and/or modifications as determined by the IEP or 504 team. Differentiation through content, process, product, environment Provide Title I services to students not meeting academic standards in ELA and/or Math. Provide instructional adaptations and interventions in the general education classroom. Modify classroom environment to support student needs. Differentiated instruction

		Basic Skills Intensive individual intervention

Sources

New Jersey Student Learning Standards (2016) http://www.state.nj.us/education/cccs/2016/math/standards.pdf
New Jersey Student Learning Standards: Technology (2014) - http://www.state.nj.us/education/cccs/2014/tech/8.pdf
New Jersey Student Learning Standards: ELA (2014) - https://www.state.nj.us/education/cccs/2016/ela/g01.pdf
New Jersey Science and Engineering Practices - https://www.state.nj.us/education/aps/cccs/science/resources/QRk2.pdf
21st Century Life and Careers:https://www.state.nj.us/education/cccs/2014/career/91.pdf
Pearson enVision 2.0 (2016) https://www.pearsonrealize.com/index.html#/