

K Thru 2 Can Do! Math and Economics

Lesson 1: Welcome Party Wants

Number and Operations

Standard 1: Number Sense

NO.1.K.1 Count with understanding, explaining that each object should be counted only once and that placement of objects does not change the total amount

Standard 3: Numerical Operations and Estimations

NO.3.K.1 Develop strategies for basic addition facts: counting all, counting on, one more, two more

NO. 3.1.1 Develop strategies for basic addition facts:

- Counting all
- Counting on
- One more, two more
- Doubles
- Doubles plus one or minus one
- Make ten
- Using ten frames
- Identity Property (add zero)

NO. 3.2.1 Develop strategies for basic addition facts:

- Counting all
- Counting on
- One more, two more
- Doubles
- Doubles plus one or minus one
- Make ten
- Using ten frames
- Identity Property (add zero)

Lesson 2: There's Not Enough Room

Measurement

Standard 13: Systems of Measurement

M.13.K.7 Cover a figure with one type of shape and tell how many it takes to cover
(*Area* answers the question: How much to cover?)

M.13.1.10 Cover a figure with squares and tell how many it takes

M.13.2.13 Find the *area* of a region by counting squares on a grid

Lesson 3: We Are Good at Finding Goods

Data Analysis and Probability

Standard 14: Data Representation

DAP.14.K.1 Explore and discuss data collection by collecting, organizing and displaying physical objects

DAP.14.1.1 Identify the purpose for data collection and collect, organize and display physical objects

DAP. 14.2.1 Identify the purpose for data collection and collect, organize, record and display the data using physical materials (pictographs, Venn diagrams and vertical and horizontal bar graphs)

Lesson 4: Stepping into Services

Number and Operations

Standard 1: Number Sense

- NO.1.K.7 Orally determine relative position using ordinal numbers (first through tenth)
- NO.1.1.8 Determine relative position using ordinal numbers (first through twelfth)
- NO.1.2.6 Determine relative position using ordinal numbers (first through eighteenth)

Algebra

Standard 4: Patterns, Relations and Functions

- A.4.K.1 Identify how objects are alike or different
- A.4.K.2 sort objects into groups in one or more ways and identify which attribute was used to sort
- A.4.1.1 Sort and classify objects by one or two attributes in more than one way
- A.4.2.1 Sort, classify, and label objects by three or more attributes in more than one way

Data Analysis and Probability

Standard 14: Data Representation

- DAP.14.K.1 Explore and discuss data collection by collecting, organizing and displaying physical objects
- DAP.14.1.1 Identify the purpose for data collection and collect, organize and display physical objects
- DAP. 14.2.1 Identify the purpose for data collection and collect, organize, record and display the data using physical materials (pictographs, Venn diagrams and vertical and horizontal bar graphs)

Lesson 5: Does Honey Come from Cows?

Number and Operations

Standard 1: Number Sense

- NO.1.K.1 Count with understanding explaining that each object should be counted only once and that the placement of objects does not change the total amount
- NO.1.K.2 Group physical objects to represent a whole number less than 10 in at least two ways using composition and decomposition
- NO.1.K.9 Compare and order numbers less than twenty using terms more than, same amount as, less than
- NO.1.1.1 Use efficient strategies to count a given set of objects in groups of 10 to 100
- NO.1.2.1 Use efficient strategies to count a given set of objects in groups of 2s and 5s to 100 and in groups of 3s to 30

Standard 2: Properties of Number Operations

- NO.2.K.1 Count on and back using physical models or a number line starting at any whole number between zero and twenty
- NO.2.K.3 Demonstrate the relationship between addition and subtraction with informal language and models in contextual situations involving whole numbers
- NO.2.K.4 Partition or share a small set of objects into groups of equal size
- NO.2.1.5 Identify and use relationships between addition and subtraction to solve problems in contextual situations involving whole numbers
- NO.2.1.6 Model and represent division as sharing equally in contextual situations
- NO.2.2.6 Determine relative position using ordinal numbers first through eighteenth
- NO.2.2.7 Compare 2 numbers, less than 100 using numerals and =, <, > with and without appropriate technology

Algebra

Standard 4: Patterns, Relations and Functions

- A.4.K.4 Use patterns to rote count up to 100 and count backward from 20 to 0
- A.4.K.5 Identify, describe and extend skip-counting patterns by 5s and 10s
- A.4.1.3 Use patterns to count forward and backward when given a number less than or equal to 50
- A.4.2.3 Use patterns to count forward and backward when given a number less than or equal to 100

Lesson 6: Tools of the Trade

Measurement

Standard 12: Physical Attributes

- M.12.1.8 Recognize attributes of measurement (length, weight, capacity and mass) and identify appropriate tools used to measure each attribute

Standard 13: Systems of Measurement

- M.13.2.10 Select appropriate customary measurement tools (rulers, balance scale, cup and thermometer) for situations involving length capacity, and mass

Lesson 7: Timely Producers

Measurement

Standard 12: Physical Attributes

- M.12.K.3 Recognize that a clock is used to tell time
- M.12.1.3 Recognize that an hour is longer than a minute and a minute is longer than a second
- M.12.2.2 Recognize that there are 24 hours in a day

Standard 13: Systems of Measurement

- M.13.K.2 Tell time to the hour the nearest hour using analog and digital clock
- M.13.K.3 Order events based on time
- M.13.1.2 Tell time to the half-hour
- M.13.1.3 Determine elapsed time to the hour in contextual situations
- M.13.2.2 Tell time to the nearest five minute interval
- M.13.2.3 Determine elapsed time in contextual situations in hour increments regardless of starting time

Lesson 8: Clever Consumers

Measurement

Standard 12: Physical Attributes

- M.12.K.4 Recognize and identify *attributes* of penny, nickel, dime, and quarter
- M.12.K.5 State the values of coins (penny, nickel, dime)
- M.12.1.4 Recognize and identify *attributes* of penny, nickel, dime, quarter and dollar bill
- M.12.1.5 State the values of a penny, nickel, dime, and quarter and dollar bill
- M.12.2.3 State the value of all coins and a dollar
- M.12.2.4 Compare the value of all coins

Standard 13: Systems of Measurement

- M.13.1.4 Determine the value of a small collection of coins (with a total value up to one dollar) using one or two different types of coins, including pennies, nickels, dimes and quarters
- M.13.1.5 Represent and write the value of money using the cents sign
- M.13.2.4 Determine the value of a combination of coins up to the dollar

- M.13.2.5 Demonstrate a given value of money up to \$1.00 using a variety of coin combinations
- M.13.2.6 Demonstrate a given value of money up to \$1.00 using the fewest coins possible
- M.13.2.8 Calculate the amount of money, spent with and without *regrouping* in a *contextual situation*

Lesson 9: Choices! Choices! Choices!

Data Analysis and Probability

Standard 14: Data Representation

DAP.14.K.1 Explore and discuss data collection by collecting, organizing and displaying physical objects

Standard 15: Data Analysis

DAP.15.K.1 Analyze and interpret concrete and *pictorial graphs* (i.e. *bar graphs, pictographs, Venn diagrams, T-chart*)

DAP.15.1.1 Analyze and interpret concrete and *pictorial graphs* (i.e. *bar graphs, pictographs, Venn diagrams, T-chart*)

DAP.15.1.2 Make a true statement about the data displayed on a graph or chart (i.e. 5 people ride the bus)

DAP.15.2.1 Analyze and make predictions from data represented in charts and graphs

DAP.15.2.2 Make true statements comparing data displayed on a graph or chart

Lesson 10: Hats Off to Human Capital

Geometry

Standard 8: Geometric Properties

G.8.K.3 Sort, describe and make geometric figures (triangle, rectangle [including square] and circle) by investigating their physical characteristics independent of position or size

G.8.1.3 Compare and make geometric figures (triangle, rectangle [including square] and circle) by investigating their physical characteristics independent of position or size

G.8.2.3 Identify, classify and describe two dimensional geometric figures (rectangle [including square], triangle and circle) using concrete objects drawings, and computer graphics

Lesson 11: Shaping Up as Specialists

Geometry

Standard 8: Geometric Properties

G.8.K.2 Locate the presence of two-dimensional figures within three-dimensional objects in the environment

G.8.K.3 Sort, describe and make geometric figures (triangle, rectangle [including square] and circle) by investigating their physical characteristics independent of position or size

G.8.1.2 Investigate the presence of *three dimensional* objects in the environment

G.8.1.3 Compare and make geometric figures (triangle, rectangle [including square] and circle) by investigating their physical characteristics independent of position or size

G.8.2.2 Match three-dimensional objects to their two-dimensional faces

G.8.2.3 Identify, classify and describe two dimensional geometric figures (rectangle [including square], triangle and circle) using concrete objects drawings, and computer graphics

Data Analysis and Probability

Standard 14: Data Representation

DAP.14.K.1 Explore and discuss data collection by collecting, organizing and displaying physical objects

DAP.14.1.1 Identify the purpose for data collection and collect, organize and display physical objects for describing the results

DAP.14.2.1 Identify the purpose for data collection and collect, organize, record and display the data using physical materials (pictographs, Venn diagrams and vertical and horizontal bar graphs)

Standard 15: Data Analysis

DAP.15.K.1 Analyze and interpret concrete and *pictorial graphs* (i.e. *bar graphs, pictographs, Venn diagrams, T-chart*)

DAP.15.1.1 Analyze and interpret concrete and *pictorial graphs* (i.e. *bar graphs, pictographs, Venn diagrams, T-chart*)

DAP.15.1.2 Make a true statement about the data displayed on a graph or chart

DAP.15.2.1 Analyze and make predictions from data represented in charts and graphs

DAP.15.2.2 Make true statements comparing data displayed on a graph or chart

Lesson 12: I'll Give You This for That**Number and Operations****Standard 1: Number Sense**

NO.1.K.7 Orally determine relative position using *ordinal numbers* (first through tenth)

NO.1.1.8 Determine relative position using *ordinal numbers* (first through twelfth)

NO.1.2.6 Determine relative position using ordinal numbers (first through eighteenth)

Algebra**Standard 4: Patterns, Relations and Functions**

A.4.K.6 Duplicate, extend, create and describe repeating *patterns* using a wide variety of materials

A.4.1.6 Recognize, extend, and create simple repeating and growing *patterns* using a wide variety of materials and describe them using words, pictures or symbols

A.4.2.6 Recognize, describe, extend, and create repeating and growing patterns using a wide variety of materials to solve problems