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2
Math

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TEKS revisions

TAKS



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TEKS Mathematics Grade 2 Objectives

Objective 1 Numbers, Operations, and Quantitative Reasoning

- 2.1: The student understands how place value is used to represent whole numbers.
- A. Use concrete models of hundreds, tens, and ones to represent a given whole number (up to 999) in various ways
 - B. Use place value to read, write, and describe the value of whole numbers to 999
 - C. Use place value to compare and order whole numbers to 999 and record the comparisons using numbers and symbols (<, =, >)
- 2.2: The student describes how fractions are used to name parts of whole objects or sets of objects.
- A. Use concrete models to represent and name fractional parts of a whole object (with denominators of 12 or less)
 - B. Use concrete models to represent and name fractional parts of a set of objects (with denominators of 12 or less)
 - C. Use concrete models to determine if a fractional part of a whole is closer to 0, $\frac{1}{2}$, or 1
- 2.3: The student adds and subtracts whole numbers to solve problems.
- A. Recall and apply basic addition and subtraction facts
 - B. Model addition and subtraction of two-digit numbers with objects, pictures, words, and numbers
 - C. Select addition or subtraction to solve problems using two-digit numbers, whether or not regrouping is necessary
 - D. Determine the value of a collection of coins up to one dollar

- E. Describe how the cent symbol, dollar symbol, and the decimal point are used to name the value of a collection of coins
- 2.4: The student models multiplication and division.
- A. Model, create, and describe multiplication situations in which equivalent sets of concrete objects are joined
 - B. Model, create, and describe division situations in which a set of concrete objects is separated into equivalent sets

Objective 2 Patterns, Relationships, and Algebraic Thinking

- 2.5: The student uses patterns in numbers and operations.
- A. Find patterns in numbers such as in a 100s chart
 - B. Use patterns in place value to compare and order whole numbers through 999
 - C. Use patterns and relationships to develop strategies to remember basic addition and subtraction facts; determine patterns in related addition and subtraction number sentences (including fact families)
- 2.6: The student uses patterns to describe relationships and make predictions.
- A. Generate a list of paired numbers based on a real-life situation such as number of tricycles related to number of wheels
 - B. Identify patterns in a list of related number pairs based on a real-life situation and extend the list
 - C. Identify, describe, and extend repeating and additive patterns to make predictions and solve problems

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Objective 3

Geometry and Spatial Reasoning

- 2.7: The student uses attributes to identify two- and three-dimensional geometric figures. The student compares and contrasts two- and three-dimensional geometric figures or both.
- A. Describe attributes (number of vertices, faces, edges, sides) of two- and three-dimensional geometric figures such as circles, polygons, spheres, cones, cylinders, prisms, and pyramids
 - B. Use attributes to describe how 2 two-dimensional figures or 2 three-dimensional geometric figures are alike or different
 - C. Cut two-dimensional geometric figures apart and identify the new geometric figures formed
- 2.8: The student recognizes that a line can be used to represent a set of numbers and its properties.
- A. Use whole numbers to locate and name points on a number line

Objective 4

Measurement

- 2.9: The student directly compares the attributes of length, area, weight/mass, and capacity and uses comparative language to solve problems and answer questions. The student selects and uses nonstandard units to describe length, area, capacity, and weight/mass. The student recognizes and uses models that approximate standard units (both metric and customary systems) of length, weight/mass, capacity, and time.
- A. Identify concrete models that approximate standard units of length and use them to measure length
 - B. Select a non-standard unit of measure such as square tiles to determine the area of a two-dimensional surface
 - C. Select a non-standard unit of measure such as a bathroom cup or a jar to determine the capacity of a given container

- D. Select a non-standard unit of measure such as beans or marbles to determine the weight/mass of a given object
- 2.10: The student uses standard tools to estimate and measure time and temperature (in degrees Fahrenheit).
- A. Read a thermometer to gather data
 - B. Read and write times shown on analog and digital clocks using five-minute increments
 - C. Describe activities that take approximately one second, one minute, and one hour

Objective 5

Probability and Statistics

- 2.11: The student organizes data to make it useful for interpreting information.
- A. Construct picture graphs and bar-type graphs
 - B. Draw conclusions and answer questions based on picture graphs and bar-type graphs
 - C. Use data to describe events as more likely or less likely

Objective 6

Underlying Processes and Mathematical Tools

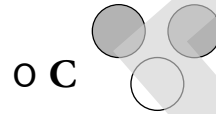
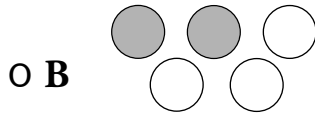
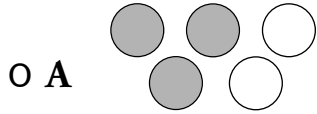
- 2.12: The student applies Grade 2 mathematics to solve problems connected to everyday experiences and activities in and outside of school.
- A. Identify the mathematics in everyday situations
 - B. Solve problems with guidance that incorporate the processes of problem solving
 - C. Select or develop an appropriate problem-solving plan or strategy
- 2.13: The student communicates about Grade 2 mathematics using informal language.
- A. Explain and record observations using objects, words, pictures, numbers, and technology
 - B. Relate informal language to mathematical language and symbols

Objective 1
Exercise 15

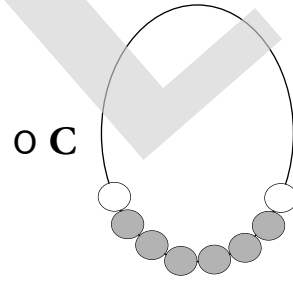
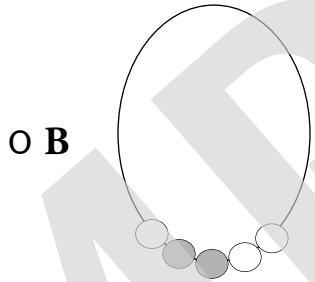
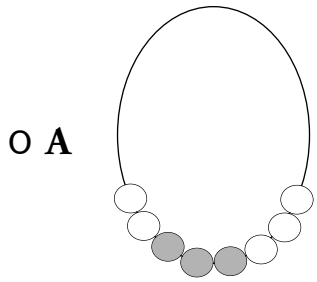
Numbers, Operations, and Quantitative Reasoning

Expectation 2.2.B: Use concrete models to represent and name fractional parts of a set of objects (with denominators of 12 or less)

1. Which group shows $\frac{2}{5}$ of the circles shaded?



2. Which necklace shows $\frac{3}{4}$ of the beads shaded?



3. Jack has 6 coins. Which picture shows that $\frac{5}{6}$ of Jack's coins are dimes?



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Objective 1
Exercise 30

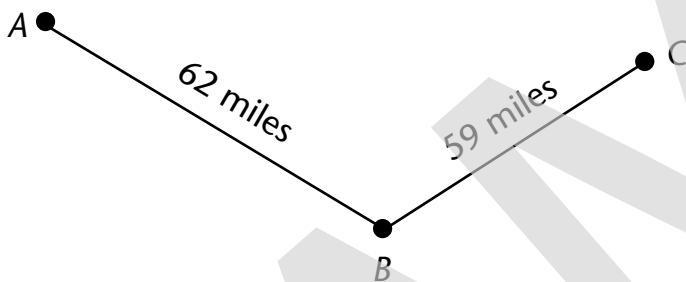
Numbers, Operations, and Quantitative Reasoning

Expectation 2.3.C: Select addition or subtraction to solve problems using two-digit numbers

1. Jody drank 32 ounces of juice. Bobby drank 15 ounces of juice. How many more ounces of juice did Jody drink than Bobby?

- A 17 ounces
 B 27 ounces
 C 47 ounces

2. Look at the map below.



A train traveled from Point *A* to Point *B*. Then the train traveled from Point *B* to Point *C*. How many miles did the train travel from Point *A* to Point *C*?

- A 111 miles
 B 117 miles
 C 121 miles

3. Geena earned a score of 88 on her math test. She added 13 extra-credit points to her test score. What was Geena's final test score?

- A 75
 B 91
 C 101

4. A store shipped 46 boxes on Monday and 38 boxes on Tuesday. How many boxes did the store ship on Monday and Tuesday?

- A 72
 B 74
 C 84

5. Molly is 48 inches tall. Her brother is 56 inches tall. How much taller than Molly is her brother?

- A 4 inches
 B 8 inches
 C 18 inches

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Objective 1
Exercise 38

Numbers, Operations, and Quantitative Reasoning

Expectation 2.3.E: Describe how the cent symbol, dollar symbol, and the decimal point are used to name the value of a collection of coins

1. Look at the coins below.



Which is a correct way to write this amount of money?

- A \$2.00
- B 20¢
- C \$0.02

2. Look at the coins below.



Which is a correct way to write this amount of money?

- A \$0.05
- B \$0.50
- C \$5.00

3. Matthew has 78 cents.



Which is a correct way to write this amount of money?

- A \$78.00
- B \$0.78
- C ¢78

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Objective 2
Exercise 6

Patterns, Relationships, and Algebraic Thinking

Expectation 2.5.B: Use patterns in place value to compare and order whole numbers through 999

1. Look at the numbers below.

27 31 25 29 33

Which of the following shows these numbers arranged in a pattern?

- A 25, 31, 27, 29, 33
 B 25, 27, 29, 31, 33
 C 33, 27, 31, 25, 29
2. What are the missing numbers in the pattern below?

2, 4, 8, _____, 32, _____

- A 12, 36
 B 16, 48
 C 16, 64

3. What numbers complete the pattern below?

785, 775, 765, 755, _____, _____

- A 855, 845
 B 745, 735
 C 715, 705

4. Look at the numbers below.

811 801 831 841 821

Which of the following shows these numbers arranged in a pattern?

- A 801, 841, 811, 831, 821
 B 821, 801, 831, 841, 811
 C 841, 831, 821, 811, 801

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Objective 3
Exercise 8

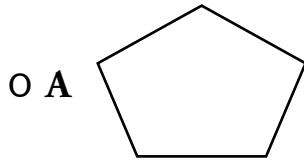
Geometry and Spatial Reasoning

Expectation 2.7.B: Use attributes to describe how 2 two-dimensional figures or 2 three-dimensional geometric figures are alike or different

1. Look at the figure below.



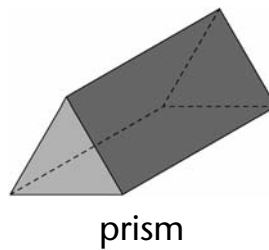
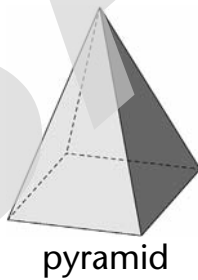
Which figure is most like the one shown above?



2. Which figure is different than the other two?



3. The picture below shows a pyramid and a prism.



The pyramid and prism are alike because they both have—

- A 5 faces B 5 vertices C 6 faces

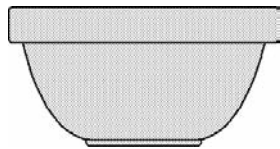
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Objective 4
Exercise 11

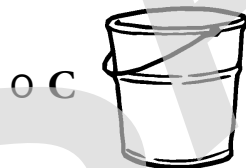
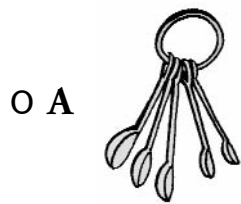
Measurement

Expectation 2.9.C: Select a non-standard unit of measure such as a bathroom cup or a jar to determine the capacity of a given container

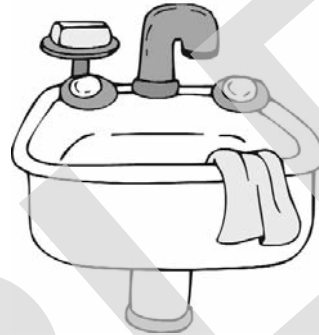
1. Look at the picture of a mixing bowl below.



Which object would be best for measuring the capacity of a mixing bowl?



2. Look at the picture of a sink below.



Which object would be best for measuring the capacity of a sink?



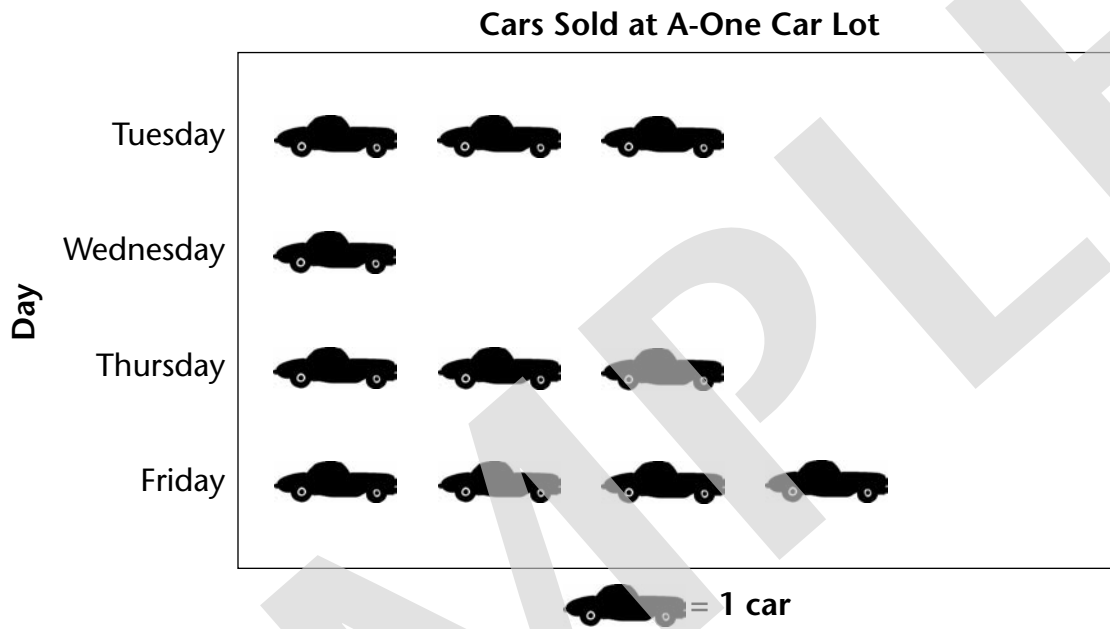
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Objective 5
Exercise 6

Probability and Statistics

Expectation 2.11.B: Draw conclusions and answer questions based on picture graphs and bar-type graphs

The picture graph below shows the number of cars sold at the A-One Car Lot in four days. Use the graph to answer questions 1–4.



1. What was the total number of cars sold during the four days?

- A 4
- B 8
- C 11

2. How many more cars were sold on Tuesday than on Wednesday?

- A 1
- B 2
- C 3

3. On which two days were the same number of cars sold?

- A Monday and Tuesday
- B Tuesday and Thursday
- C Wednesday and Thursday

4. On which day were the fewest number of cars sold?

- A Tuesday
- B Wednesday
- C Thursday

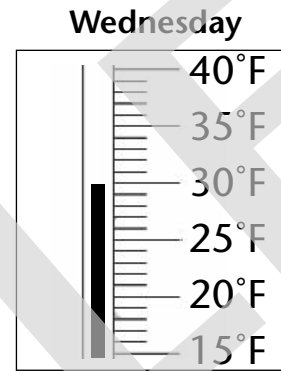
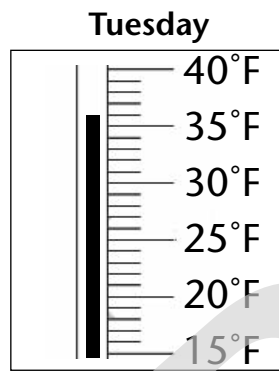
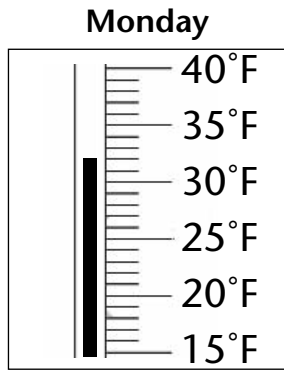
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Objective 6
Exercise 13

Underlying Processes and Mathematical Tools

Expectation 2.13.A: Explain and record observations using objects, words, pictures, numbers, and technology

1. Trish records the outside temperature every morning at 9:00. The thermometers show the temperatures for 3 days.



Which table correctly shows the temperatures for these 3 days?

A

Monday	30°F
Tuesday	32°F
Wednesday	36°F

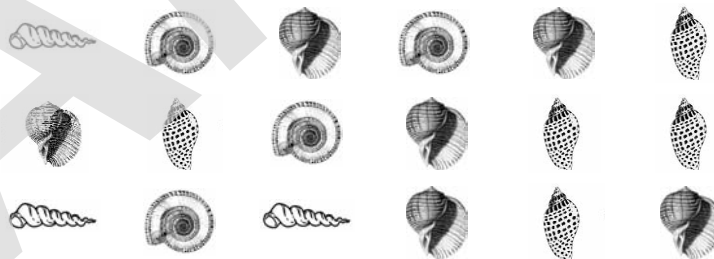
B

Monday	36°F
Tuesday	32°F
Wednesday	30°F

C

Monday	32°F
Tuesday	36°F
Wednesday	30°F

2. Look at the picture below.



Which table shows the correct number of each different kind of shell?

A

	4
	5
	6
	3

B

	4
	5
	3
	6

C

	4
	3
	5
	6

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