Depth of Knowledge Matrix - Elementary Math

Topic	Adding 1-Digit Numbers (< 5)	Equality	Interpreting Data	Money
CCSS Stand.	• K.OA.5	• 1.OA.7	• 1.MD.4	• 2.MD.8
DOK 1 Example	Solve. $$3 + 1 =$$	Determine whether the number sentence is true or false. $$4 + 1 = 5 - 2$$	How many people were surveyed?	If you have 1 quarter, 4 dimes, 2 nickels, and 3 pennies, how many cents do you have?
DOK 2 Example	Use the digits 1 to 5, at most one time each, to fill in the boxes to create two true number sentences. $$\Box + \Box = \Box$$	Use the digits 1 to 9, at most one time each, to fill in the boxes to create two true number sentences. $$\Box + \Box = \Box - \Box$$	Make a graph that shows a possible result of 7 students' favorite color.	Make 72¢ in two different ways with either quarters, dimes, nickels, or pennies.
DOK 3 Example	Use the digits 1 to 5, at most one time each, to fill in the boxes to create a true number sentences with the greatest possible sum. $$\Box + \Box = \Box$$	Use the digits 1 to 9, at most one time each, to fill in the boxes to create a true number sentence with the greatest possible value. $$\Box + \Box = \Box - \Box$$	Make a graph that shows a possible result of 7 students' favorite color with red being the most popular color.	Make 72¢ using exactly 9 coins that are either quarters, dimes, nickels, or pennies.

Depth of Knowledge Matrix - Elementary Math

Topic	Subtracting 3-Digit Numbers	Operations with Time	Comparing Fractions	Multiplying Decimals
CCSS Stand.	• 3.NBT.2	• 3.MD.1	• 4.NF.2	• 5.NBT.7
DOK 1 Example	Solve. $$821 - 357 =$$	What time will it be 14 minutes after 1:27 pm?	Place a < or > between the two fractions to make a true number sentence. $$\frac{4}{7} \qquad \frac{3}{5}$$	Solve. $$3.4 \times 2.5 =$$
DOK 2 Example	Use the digits 1 to 9, at most one time each, to fill in the boxes to make two different pairs of three-digit numbers that form a true number sentence. $$\square\square\square - 291 = \square\square\square$$	Use the digits 1 to 9, at most one time each, to fill in the boxes to make a time that is 4:37 pm. $$\square\square \text{ minutes after}$$ $$\square{:}\square\square \text{ pm}$$	Use the digits 1 to 9, at most one time each, to fill in the boxes to create two different fractions: one that is less than one half and one that is more than one half. $$\frac{\square}{\square} < \frac{1}{2} \text{ and } \frac{\square}{\square} > \frac{1}{2}$$	Use the digits 1 to 9, at most one time each, to fill in the boxes to make a true number sentence. $$\square.\square \times 3.2 = \square.\square$$
DOK 3 Example	Use the digits 1 to 9, at most one time each, to fill in the boxes to make a difference that is as close to 329 as possible. $$\square\square\square - \square\square\square =$$	Use the digits 1 to 9, at most one time each, to fill in the boxes to make the latest possible time. $$\square\square \text{ minutes after}$$ $$\square{:}\square\square \text{ pm}$$	Use the digits 1 to 9, at most one time each, to fill in the boxes to create a fraction that is as close to 5/11 as possible. $$\frac{\square}{\square}$$	Use the digits 1 to 9, at most one time each, so that the product is as close to 50 as possible. $$\square.\square \times \square.\square =$$