Story of Units 5th Grade Application Problems
Module 1

Lesson 1
Farmer Jim keeps 12 hens in every coop. If Farmer Jim has 20 coops, how many hens does he have in all? If every hen lays 9 eggs on Monday, how many eggs will Farmer Jim collect on Monday? Explain your reasoning using words, numbers, or pictures.

Lesson 2
A school district ordered 247 boxes of pencils. Each box contains 100 pencils. If the pencils are to be shared evenly amongst 10 classrooms, how many pencils will each class receive? Draw a place value chart to show your thinking.

Lesson 3
Jack and Kevin are creating a mosaic by using fragments of broken tiles for art class. They want the mosaic to have 100 sections. If each section requires 31.5 tiles, how many tiles will they need to complete the mosaic?

Lesson 4
Mr. Brown wants to withdraw $1,000 from his bank and in ten dollar bills. How many ten dollar bills should he receive?

Lesson 5
Jordon measures a desk at 200 cm. James measures the same desk in millimeters, and Amy measures the same desk in meters. What is James' measurement in millimeters? What is Amy's

measurement in meters? Show your thinking using a place value mat or equation using place value mat or an equation with exponents.

Lesson 6
Ms. Meyer measured the edge of her dining table to the thousandths of a meter. The edge of the table measured 32.15 meters. Write her measurement in word form, unit form, and in expanded form using fractions and decimals.

Lesson 7
Craig, Randy, Charlie, and Sam ran in a 5K race on Saturday. They were the top 4 finishers. Here are their race times:

Craig: 25.9 minutes   Randy: 32.2 minutes
Charlie: 32.28 minutes   Sam: 25.85 minutes

Who won first place? Who won second place? Third? Fourth?

Lesson 8
Organic, whole-wheat flour sells in bags weighing 2.915 kilograms. How much flour is this rounded to the nearest tenth? How much flour is this rounded to the nearest one? What is the difference of the two answers? Use a place value chart and number line to explain your thinking.

Lesson 9
Ten baseballs weight 1,417.4 grams. About how much does 1 baseball weigh? Round your answer to the nearest tenth of a gram. Round your answer to the nearest gram. If someone asked you, "About how much does a baseball weigh?" which answer would you give? Why?

Lesson 10
At the 2012 London Olympics, Michael Phelps won the gold medal in the men's 100 meter butterfly. He swam the first 50 meters in 26.96 seconds. The second 50 meters took him 25.39 seconds. What was his total time?

Lesson 11
After school, Marcus ran 3.2km and Cindy ran 1.95km. Who ran farther? How much farther?

Lesson 12
Patty buys 7 juice boxes a month for lunch. If one juice costs $2.79, how much money does Patty spend on juice each month? Use an area model to solve.
Extension: How much will Patty spend on juice in 10 months? In 12 months?

Lesson 13
Louis buys 4 chocolates. Each chocolate costs $2.35. Louis multiplies 4 x 235 and gets 940. Place the decimal to the show the cost of the chocolates and explain your reasoning using words, numbers, and pictures.
Lesson 14
A bag of potato chips contains 0.96 grams of sodium. If the bag is split into 8 equal servings, how many grams of sodium will each serving contain?

Bonus: What other ways can the bag be divided into equal servings so that the amount of sodium in each serving has two digits to the right of the decimal and the digits are greater than zero in the tenths and hundredths place.

Lesson 15

Jose bought a bag of 6 oranges for $2.82. He also bought 5 pineapples. He gave the cashier $20 and received $1.43 change. What did each pineapple cost?

Lesson 16

Jesse and three friends buy snacks for a hike. They buy trail mix for $5.42, apples for $2.55, and granola bars for $3.39. If the four friends split the cost of the snacks equally, how much should each friend pay?