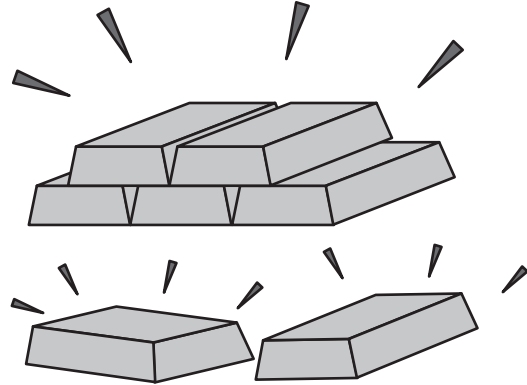Name _____   Date _____

Frank's Weight in Gold

Frank helped his father clean out the garage to earn money to pay for his science experiment. When they were finished his father said, "Great job, Frank. You are worth your weight in gold!"

"That sounds like a lot of gold," said Frank. "I wonder how much that is worth," he thought aloud.

"Well, it is really just a saying," replied his father, "but we can find out."

Together they looked up the current price of gold on a financial website and learned that the price of gold changes every fifteen minutes. At the beginning of the day, the price was $42.65 per gram and by the end of the day it was $45.40 per gram.

"The price is not exact; it is a range. We will have to estimate your worth in gold for the day," said his father.

Frank thought, "If I round the price of gold to convenient numbers that would be a range of about $43 to $45 dollars per gram for today. I weigh 88 pounds. I know that is like 40 kilograms, but how many grams is that?"

"There are exactly 1000 grams in one kilogram," his father replied.

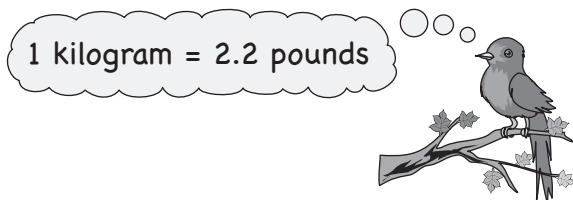"So how much is my weight in gold worth?" asked Frank.

Explore

1. Help Frank estimate the range of what his weight in gold is worth for the day. Show or tell how you solved the problem.

2. Frank wondered if it would be a better compliment to say he is worth his weight in $10 bills. A $10 bill weighs approximately one gram.

    A. What is Frank's weight in $10 bills worth?

    B. What is worth more: Frank's weight in gold or his weight in $10 bills? Show or explain how you know.

✓ Check-In: Question 3

3. Professor Peabody weighs 180 pounds. He wants to know how much he would be worth in gold. He checked the price of gold and found that in the morning it was worth $35.25 per gram and in the afternoon it was worth $37.80 per gram. Use estimation to find the range for how much Professor Peabody is worth in gold. Show or tell how you found your answer.

> 1 kilogram = 2.2 pounds

Name _____ Date _____

Frank's Weight in Gold Check-In: Question 3 Feedback Box	Expectation	Check In	Comments
Use strategies to estimate quantities (e.g., rounding, using benchmarks).	E3		
Estimate products.	E8		

	Yes . . .	Yes, but . . .	No, but . . .	No . . .
MPE2. Find a strategy. I choose good tools and an efficient strategy for solving the problem.				
MPE5. Show my work. I show or tell how I arrived at my answer so someone else can understand my thinking.				