

Date:

Title:

(A) **Lesson Objectives:**

- a. Introduce the concept of rounding numbers to a given place value.
- b. Introduce the concept of significant figures.
- c. Introduce the concept of rounding numbers to a certain number of significant figures.
- d. Introduce the concept of operations with numbers
- e. Use real world examples to show why we need to round numbers.

(B) **Contextual Introduction**

- a. **Unit Price** → The "Unit Price" (or "unit cost") tells you the cost per liter, per kilogram, per pound, etc, of what you want to buy → so, which is a "better buy"? (a) a 342 mL can of Coke for 50 php or a 2.5 litre bottle of Coke for 296 php
- b. **Fuel Consumption** → Cars are "rated" by their fuel efficiencies (which car gets the most miles/gallon or uses the least fuel (in litres) to travel 100 km) → which car is the most fuel efficient? (a) a Honda that can travel 62 miles and use only 3.3 gallons of gas or a Mercedes that can travel 115 miles on 4.78 gallons
- c. **Density** → Does an "unknown substance" weighing 2.25 kg float, if its volume is 2576 cm³?

(C) **Rationale** → WHY do we round numbers?

(D) **Practice of Rounding** → <http://math.about.com/library/roundingb.pdf> ,
<http://math.about.com/library/roundingc.pdf> , [Worksheet Link 1: From homeschoolmath.net](#)

(E) **Significant Figures** → What are they? Why do we use them? How do we use them?

(F) **Practice with Significant Figures** → <http://www.fordhamprep.org/gcurran/sho/sho/lessons/lesson23.htm> ,
<http://misterguch.brinkster.net/september2002.pdf>

(G) **Homework (From HH Textbook)**

- **Sec 2E**, p45, Q2acdeg, Q3fg, Q4 AND
- **Sec 2E.2**, p47, Q1eol ,2eol, AND
- **Sec 2E.3**, Q1,2,3,5eol

(H) **Resources**

- Video help for rounding decimals:
 - o http://www.youtube.com/watch?v=CyZjgqGBf_c&feature=related
- Video help for counting significant figures
 - o <http://www.youtube.com/watch?v=fXL06Eu4uVg&feature=related>
- Video help for counting sig figs and rounding
 - o <http://www.youtube.com/watch?v=zp9Je64ERDE&feature=related>
- Reading from PurpleMath
 - o <http://www.purplemath.com/modules/rounding.htm>