Unit: Percents
Student Handout 5

Name _____

Date _____Pd_____

PERCENT OF CHANGE

PERCENT CHANGE

- Percent change describes the _____ over time by either an _____ or_____ .
- It can be solved using a percent proportion in which the values are plugged into the formula below:

$$\frac{\%}{100} = \frac{\text{CHANGE}}{\text{ORIGINAL}}$$

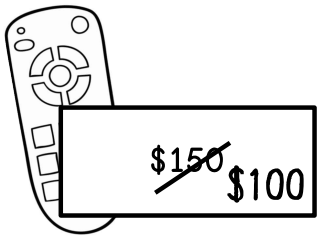
- Change can be represented by the _____ between the new and original values.

Use your understanding of percent change to complete the table below. Round all your answers to the nearest tenths place.

	A gallon of milk cost $2.79 in 2000. In 2020, it cost $3.98.	A frozen pizza cost $3.00 in 2000. In 2020, it cost $2.50.	A jumbo-sized movie popcorn cost $8.20 in 2000. In 2020, it cost $10.65.
ORIGINAL			
NEW			
CHANGE			
PERCENT PROPORTION AND WORK			
INCREASE OR DECREASE			
SOLUTION			

Apply your understanding of ratios and proportions to answer the questions below.

1. Dustin bought a DVD player that was marked down from $150 to $100. A video game console was $250, and the price was dropped 15%. Which device has the greatest percent decrease?



2. A sweater is marked down from $25 to $19. What is the percent of change?

3. The 7th grade class had a 15% decrease in enrollment. Last year, the 7th grade class had 280 students. How many students are enrolled in the 7th grade class this year?

4. Randall's monthly water bill from April to July is listed in the table below. What was the percent increase in his bill from May to July?

MONTH	COST ($)
April	54
May	78
June	122
July	136.50

5. Enrollment in the PTA increased by 35% this year. Last year there were 160 members in the PTA. How many PTA members are involved this year?

6. A pair of socks is purchased at wholesale for $2.00. It is then sold to the customer for $4.00. What is the percent increase?

7. Eugene earns $2,700 monthly. He is going to be receiving a 3.5% raise. With this new raise, he believes he will earn more than $2,800 a month. Is Eugene correct in his thinking? Why or why not? Justify your reasoning.

_____

_____

_____

_____

Summarize today's lesson:

Unit: Percents
Homework 5

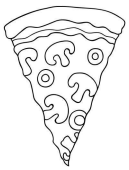
Name _____

Date _____Pd_____

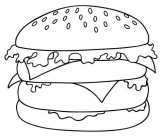
PERCENT OF CHANGE

Use your understanding of percent of change to answer the questions below.

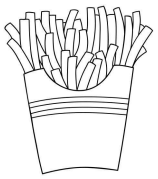
Marco is discussing how prices have changed with his son, Paul. Paul does not believe him, so they decide to research the price of their favorite food items. Use the information to determine the percent change in questions 1-4.



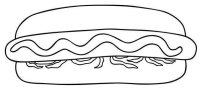
2000: $7.50
2015: $9.00



2000: $5.00
2015: $6.50



2000: $2.00
2015: $4.50



2000: $2.50
2015: $2.00

1. What is the percent of change in the cost of a pizza? _____

2. What is the percent of change in the cost of a cheeseburger? _____

3. What is the percent of change in the cost of a serving of fries? _____

4. What is the percent of change in the cost of a hot dog? _____

5. The price of a gallon of gas dropped from the summer high price of $3.50 to the winter low price of $2.87. By what percentage was the price of gas reduced?

6. In 2020, summer camp registration was $15 more than it was in 2021. In 2020, registration was $285. By what percentage did the summer camp registration decrease in 2021?

7. A baby weighs 18 pounds at her four-month appointment. Six months later, she weighs 24 pounds. By what percentage did the baby's weight increase?

8. The high school graduating class of 2000 was 260 students. Five years later, the graduating class was 320 students. By 2010, the graduating class rose to 400 students. In what five-year period did the high school graduating class experience the greatest percent of change?