Kingsborough Community College
2001 Oriental Blvd.
Brooklyn, New York 11235

HSE51/KS11 – Lesson # 7 & 8

Subject: Writing (74 – 77)

Topic – Word Choice, defining a word using Content

Writers are very careful when choosing words in their piece of writing. The use of connotation is very important. The positive and negative association to their work.

Definitions:

Figurative Language- means to make their writing vivid to the reader. These are the common:
  •   simile – compare two things another, using the words like *or as.*
  •   metaphor – an indirect comparison between two things.
  •   Personification – the use of animals portraying humans and things/objects that are not alive

Defining a Word using Context

Writers identify the meaning of a word by using c*ontext clues.*They are hints placed in a sentence, paragraph, etc. to help the reader understand the connection/relationship of a word, and will also indicate if the word or words are in a positive or negative connotation.

Why are context clues important?

Context clues help you understand the meaning of words and helps you with comprehension, when reading a piece of writing. It also helps build vocabulary and helps people to become better readers.

Writer's Tone and Point of View

Definitions.

Tone – the meaning of *tone*, is the writer's *attitude* in a piece of writing. You can decipher the tone of a writer by the choice of words/syntax that he/she uses when writing. The tone is his/her expression, and emotions through description, that allows the reader, or viewer to feel what is happening along the story. It allows you to feel that you are part of the scene.

Point of View – Is the diction and the formality in a piece of writing. There are three types of point of view:
  •   *First person point of view – stories and novels are written in 1st person point of view, where we can see the inside the character's eyes.(I, me, mine, myself, we, our, ourselves)*

  •   *Second person point of view – Is the perspective of the narrator telling the story. (you,yourself, your, yours or yourselves)*

- **Third person point of view** – author knows all in the story and narrates the story about the characters. (*he, him, himself, she, her, hers, it, its, itself, them, their, theirs, themselves, etc.*

What is the purpose of point of view?

It helps the readers understand the story, character's feelings and emotions.
Writers are able to review/criticize someone's work, in a positive or negative connotation.

Subject – Writing (90 – 95)

*Topic: - Text Related by Theme or Topic, Text with Opposing Arguments and Text with Related Graph Informatio*n

Text Related by Theme or Topic – Paired passages. Is the reading of two selections, but relating to the same topic. During the TASC/GED exam, you will be reading some information, in which you will be answering questions. You will also analyze/interpret and write an essay based on the two sources of information presented to you.

Things to Remember when writing your piece of writing:

- Annotate notes – Write them down – this give you a clear understanding what is happening
- Underline what is important – make you remember the sequence of events on how it happened/structure
- Highlight important information – it will help you summarize the information
- If you are not clear with the information read, re-read it again.
- Remember your five(5) steps of writing

Text with Opposing Arguments – Are paired passages, where one has a point to discuss/debate, while the other is based on *assumptions. (may or may not be factual) The author/writer is not providing a point, he/she is just making an assumption. (judgmental)*

Text with Related Graph Information – Is a piece of writng including information through graphs, pictures, charts, etc. to better understand the text, and enables the reader to answer questions, analyze and interpret information in a much easier way. It gives the reader a much clearer view of the text.

Subject: Science (532 – 533)
Topic: Organization of Ecosystems

Definition – Is a community or group living together and how do they interact/ adapt with each other in an environment.

An ecosystem consists of the following:
- plants – producers
- animals – consumers

- fungi, bacteria in which they live, grow, reproduce, etc.

Our Earth has a big ecosystem known as the **biosphere.** The biosphere includes land, water, lakes, ponds , oceans and tidal zones. Each has an ecosystem that has a great diversity of living things/organisms.
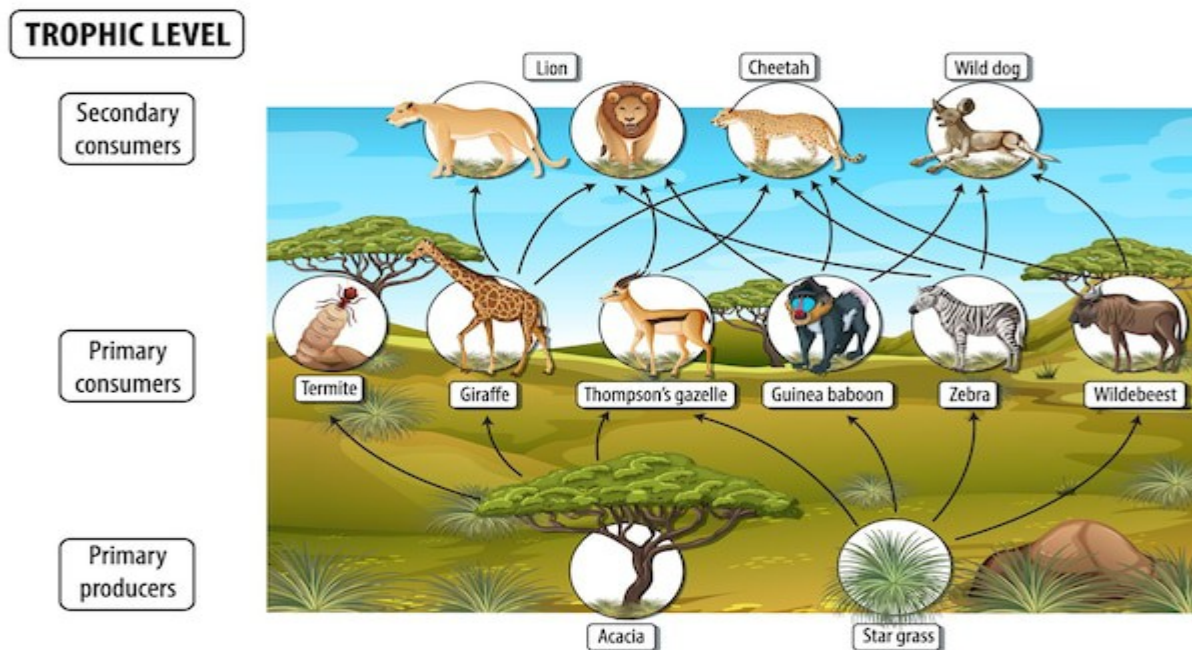
Types of Spheres
- *Biosphere – All living things (Trees, plants animals, humans, etc.)*
- *Geopshere – Surrounding of Earth (Rocks, minerals, mountains, land, etc.)*
- *Hydrosphere – Water (river, lake, ocean, sea, pond, water cycle, etc.)*
- *Lithrosphere – Inner layer of the earth*
- *Cryosphere – Ice, glaciers*
- *Atmosphere – Air – breathing - oxygen*

The *producers* are known to be plants. It gets its energy from the sun , they make their own food through photosynthesis in which they are known as *autotrophs.*

The *consumers* are the ones that depend on the producers, to get their energy in order to survive. They are the *heterotrophs.*

The cycle of life is known as t*he food chain or food web. These organisms eat, plant to get energy, and then pass through the food web.*

FOOD CHAINS AND FOOD WEBS

Explanation of the Food Web

Is the transfer of energy in an ecosystem, between animals/living things eating from each other in order to survive, and continue the life cycle of life. Following the arrow on each animal depends and lives from another.
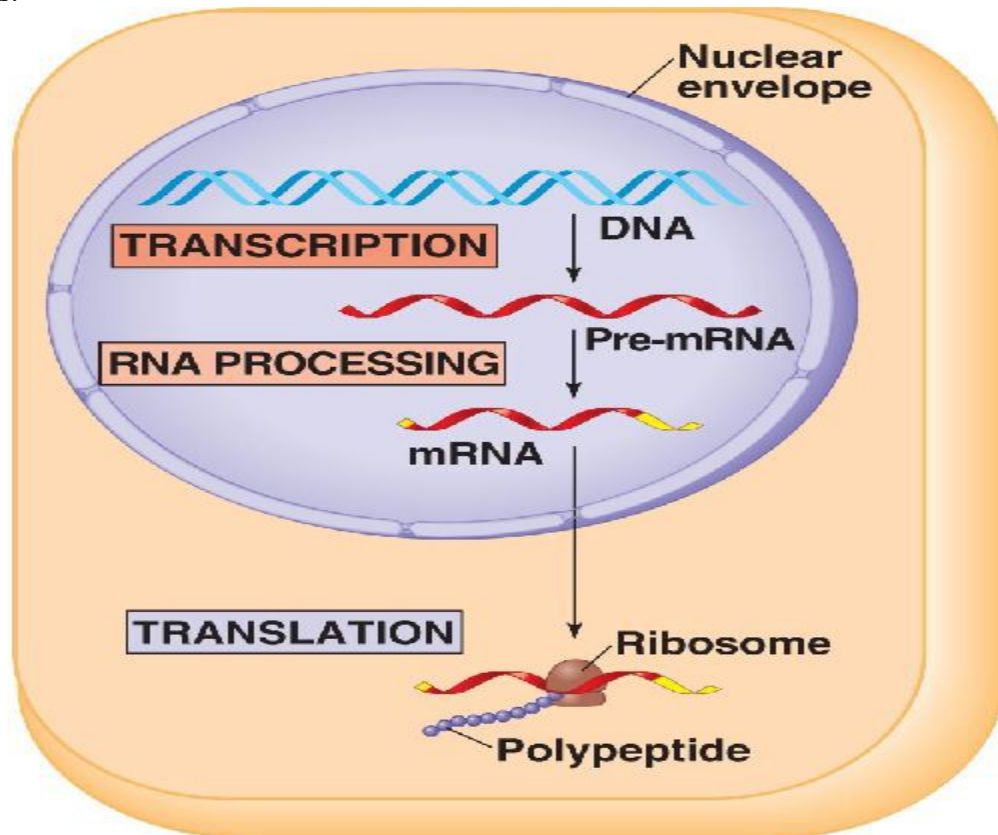
Question (TASC/GED)

1. What is the meaning of Transcription and Translation? Explain the process.

   It is the form in which genes, that is our DNA uses to make proteins.

Transcription makes a copy and sends it to the messenger (mRNA) which makes a new copy and proteins begins to synthesize/ build or create for t*ranslation* o occur.

*Translation i*s the process in which RNA is decoded/converted to make proteins – aminoacids and polypeptides.
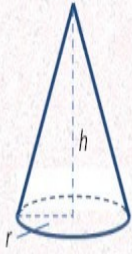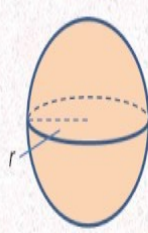
Subject: Math (Continuation – Volume of Cylinder, Cone and Spheres) (398 - 399)

- *This is sample of what we discussed in class last week and this week. We did some Exercise Practice in class from the book*

Volume

Volume of Cylinders, Cones and Spheres

Cylinders

$V = bh$ $\qquad$ $V = \pi r^2 h$

Find the volume of a cylinder with radius 3 and height 4. *(Express in terms of π).*

$$V = \pi r^2 h$$
$$V = \pi(3)^2(4)$$
$$V = \pi(9)(4)$$
$$\boxed{V = 36\pi}$$

Cones

$V = \dfrac{1}{3}bh$ $\qquad$ $V = \dfrac{1}{3}\pi r^2 h$

Find the volume of a cone with radius 3 and height 4. *(Use 3.14 for π and round your answer to the nearest tenth).*

$$V = \frac{1}{3}\pi r^2 h = \frac{1}{3}(3.14)(3)^2(4)$$
$$V = \frac{1}{3}(3.14)(36) = (12)(3.14)$$
$$V = 37.68 \qquad \boxed{V = 37.7}$$

Spheres

$V = \dfrac{4}{3}\pi r^3$

Find the volume of a sphere with radius 3. *(Express in terms of π).*

$$V = \frac{4}{3}\pi r^3 = \frac{4}{3}\pi(3)^3$$
$$V = \frac{4}{3}\pi(27) \ = 4\pi(9) \quad \boxed{V = 36\pi}$$

SCHOOL²¹

8.G.9

Subject: Math

Topic: Interest (272 – 273) Today's Lesson

Definition – is a fee or a charge given to an individual who borrows from a person or from a financial institution. Interest is expressed as APR.

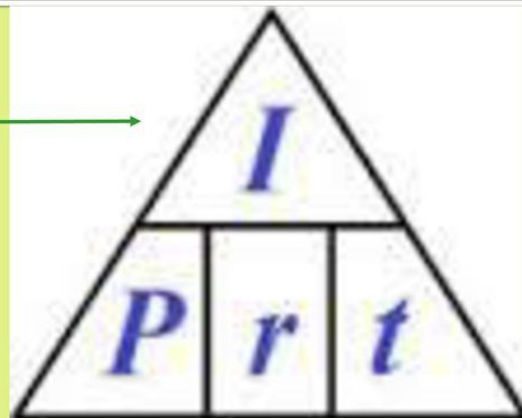# Simple interest: $I = p \times r \times t$

I = interest earned after t years

p = money borrowed or invested

r = annual rate of interest

t = the length of time you borrow or invest

Interest

Interest

Principal

Rate of interest per year (as a decimal)

Time in years that the money earns interest

Interest Rate Formula

Simple Interest $= \dfrac{P \times R \times T}{100}$

Compound Interest $= P(1+i)^t - P$

A – Amount
P – Principal -(p) – is the amount of money deposited in the bank or the amount of money borrowed from the bank
R- Rate (r) – the percent of interest to be taken on the principal
T – Time (t) – represents how long the principal is left on deposit, or how long the money is borrowed

The Simple Interest is known as I = prt (principal x rate x time)

Example: Ms. Suarez read an ad for bank offering 6 ½ % percent interest , paid yearly on saving accounts. What would a deposit of $550 earn in one year?

I = prt
I = 550 x 0.065 x 1
I = $ 35.75

Example: Mr. Lester borrowed $700 for 9 months at 10 ½ % per year. What interest did he pay?

I = prt
I = 700 x 0.105 x 0.75
I = $55. 125 or $ 55.13

Example: A department store charges 21% for overdue accounts. How much interest will be owed on a $650 account that is 3 months overdue?

Here we are given that $P = \$650$, $r = 0.21$, and $t = 3/12$.

$$I = Prt$$

$$I = 650(0.21)\left(\frac{3}{12}\right) = 34.13$$

Therefore $34.13 is owed.

Finding Interest Earned

Blake puts $500 in a savings account. The account earns 3% simple interest per year. What is the interest earned after 3 years?

$P = \$500$

$R = 3\% = 0.03$

$T = 3$ years

$I = PRT$

$I = (500)(0.03)(3)$

$I = \$45$

Compound Interest

 Definition - is the interest paid on the principal deposited in the bank plus any other previous earned interest.

Formula for Compound Interest

Compound Interest

Definition: Interest charged on both the principal amount as well as on the interest already earned.

$$A = P\left(1 + \frac{r}{n}\right)^{(nt)}$$

When entering an equation into the calculator do not forget the parentheses.

P = Principal Amount (starting)

r = decimal rate $\left(\frac{\%}{100}\right)$

t = time (usually years)

n = number of intervals

Clues/Hints:
- **Find the interest earned after the first year. ($I = prt$)**
- **Add the interest to the principal when computing interest for the next year.**

Sample Case: The amount of $900 is deposited in an account that pays 6% interest, compounded annually. How much will be in the account after 3 years?

$900 – Principal

x 0.06 – Rate of interest

$ 54.00 - Interest for the first year

+ 900.00

$ 954.00 – New principal of the first year

x 0.06

57.24 – Interest for the second year

24.00

+954.00

$ 1011.24 New principal after 2 years

x 0.06

$ 60.67 Interest for third year, rounded to the nearest cent

+ 1011. 24

$ 1071. 91 Principal after 3 years (total amount)

Compound Interest Formula

$$A = P\left(1+i\right)^{n}$$

A = final amount including principal
P = principal amount
i = interest rate per year
n = number of years invested

Compound Interest

Examples: 2) If you deposit $12,500 in an account that pays
4.5% interest quarterly, what is the balance after 8 years?
How much did the account earn in interest?

$A = P \left(1 + \frac{r}{n}\right)^{nt}$ → $A = 12500 \left(1 + \frac{.045}{4}\right)^{4 \cdot 8}$

$A = 12500 \left(1 + .01125\right)^{32}$

$A = 12500 \left(1.01125\right)^{32}$

$A = \$\ 17,880.64$

So the account gained $5380.64 dollars in the 8 years.

Subject: Mathematics

Topic: Measurements (Bar and Line Graphs, Box Plots, Circle Graphs, Line Plots and Histograms)
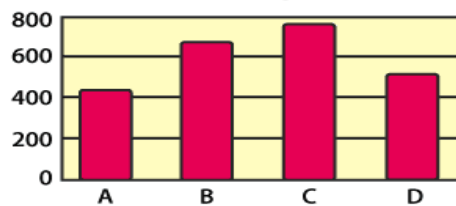   *(Statistics and Probabilty)*

Pages (280 – 297)

Definitions:

•   Bar and Line Graphs – are graphs used to compare data. Based on the information demonstrated, a person can infer, analyze and answer questions.

•   Box Plots – Is a type of chart used to explain data, from a minimum to a maximum. (in quarters)
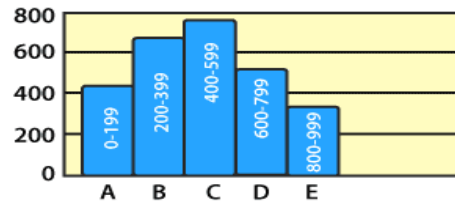
- Line Plot – A chart that displays data through points or checks

- Circle graph – is a pie or circle demonstrating information in percentages, of a whole (100%)

- Histogram – A graph demonstrating information in a rectangular form, showing the amount of frequencies or value of intervals.
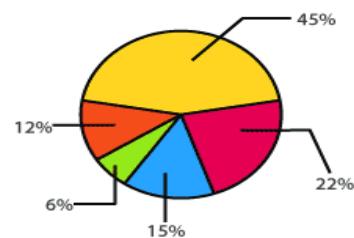
.

Bar Graphs

Histograms

Frequency Table
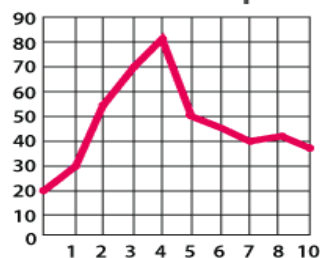
Rulers of France		
Reign (Years)	Tally	Frequency
1-15	ЖИТ ЖИТ ЖИТ III	18
16-30	ЖИТ ЖИТ I	11
31-45	ЖИТ I	6
46-60	IIII	4
61-75	I	1

Circle Graph

45%
12%
22%
6%
15%

Line Graphs

Stem and Leaf Plot

Stem	Leaf
0	1, 1, 2, 2, 3, 4, 4, 4, 4, 5, 8
1	0, 0, 0, 1, 1, 3, 7, 9
2	5, 5, 7, 7, 8, 8, 9, 9
3	0, 1, 1, 1, 2, 2, 2, 4, 5
4	0, 4, 8, 9
5	2, 6, 7, 7, 8
6	3, 6

Key : 6 | 3 = 63 Year

Line Plot

Box and Whisker Plot

© Byjus.com

Math: Measures of Central Tendency

Pages 290 - 291

Definitions:

Mean – Is the total average of a sum of numbers, divided by the amount of numbers.

Median – Is the middle Number in a set of numbers. In order to find the median, the numbers must be placed from greater to least.

Mode – Is the number repeated in a set of numbers.

Range – Is the subtraction of the greater number subtracted by the least number.

Example of a Mean (Average)

86 + 76 + 74 + 82 + 92 = 410/ 5 = 82

Example of Median (Middle number)

92, 86, 82, 76, 74 (82)

Example of Mode (Repeated number)
(no repeated number)

Range (subtraction of highest number and lower number)

92 – 74 - (18)

Subject: Social Studies (458 – 461)

Video: NCSL - The Citizen – Youtube (12 min.)

Topic: The Electoral System – The Role of a Citizen

Definition – is a process in which rules are set in an election and the results from the election. There are two parties. The Republican and the Democrats. They role is to discuss their views on;
- Taxes
- Social Security
- Education
- Spending

- Environmental Protection
- etc.

During this time of election the parties begin campaigning, running their own primary election, in which each compete with each other. This is known as **nomination**. The winner who wins the primary ends with a party **convention**, where the delegates from each party select a party candidate. After the citizens vote in a general election to cast votes for the **Electoral College**.
The candidate who wins the greatest number of Electoral votes becomes president.

Rights of a Citizen

Citizens have many rights. We have the right to make our lives better. In order to achieve this we the country has certain rights and guarantees, which are:
- People who have come to immigrate to the US can become US citizens through a process called naturalization
- The Bill of Rights, which are the first ten amendments of the Constitution
- We can contribute the the national welfare of the country (vote, public office, elect representatives to govern us
- Paying taxes gives us the right to benefit everyone
- Judiciary system gives us the right fair trial... (serve as a juror)
- Etc.

Kingsborough Community College
2100 Oriental Blvd.
Brooklyn, New York 11235

TASC in English – Lesson # 8- Exercise Practice

Directions: ***Choose two of the assignments listed. All TASC students must do the MATH. If you are only for one subject , then do the assigned subject.***

Reading and Writing

Directions: Choose one of the topics below and develop an essay, based on today's class discussion.
Argumentative Essay - (same topic opposing sides)

- School should be year round
- Free college education
- Animals used for research
- Law enforcement cameras an invasion to privacy
- Does curfew keep teens out of trouble?

Science

Essay Questions: (M*ake sure your work is your original*)

1. List and explain the types of Earth systems?
2. How do plants contribute to the ecosystem?
3. Explain the process of Transcription and Translation from DNA to proteins.
4. Explain how the loss of biodiversity contributes to global environmental decline.

Math

1a. You save $1000 for 1 year at 5 ½ %. How much will you have in the bank at the end of the year?

1b. You leave the principal plus interest in the ban for another year at the same rate. How much will you have after the second year?

2. Ms. Starck has two saving certificates. One is for $500 at 7 ½ % for 270days. The other is for $720 at 8% for 180 days. Which certificates will earn more interest? (Hint: Use 360 days = 1 year.)

3. When Jane was 16 years old, her father put $600 into a bank account that paid 6% interest. If the interest was compound semianually, how much was in the account on Jane's eighteenth birthday?

4. Dave has $500 to deposit . One bank offers a simple interest rate of 9%. Another bank offers 8%, compounded quarterly. Which ban would pay more interest rate after 2 years?

Social Studies – Essay Questions

1. Explain the purpose of the Electoral College, and how it works.
2. Why did the government decide to write the 12th amendment, modifying the electoral college system?
3. Do you believe that the electoral college is the best way to decide presidential elections? Why or why not?
4. When the Constitution was created, the electoral college system was intended to solve an issue/problem of whether Congress or the American people should elect the president. Do you believe that it solved the issue? Explain your reasons.