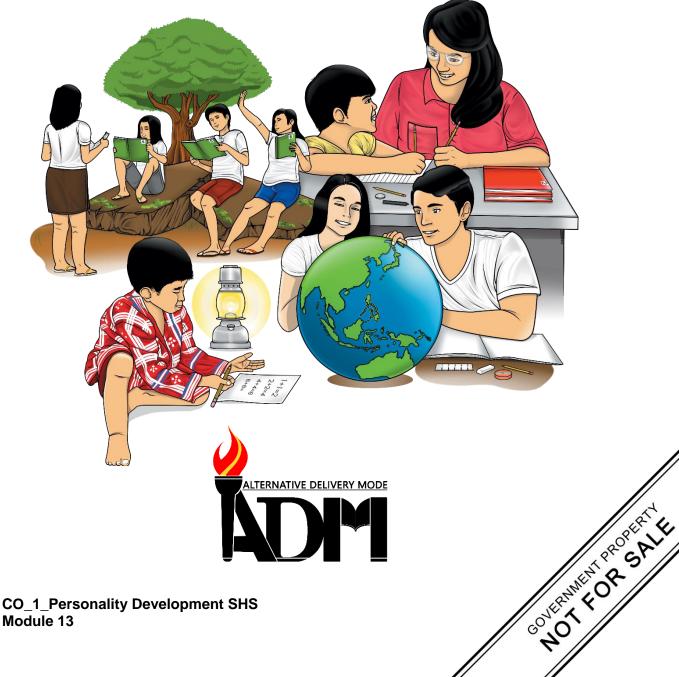


Personal Development Quarter 1 – Module 13: **Develop a Personal Plan** to Enhance Brain Functions



Personal Development Alternative Delivery Mode Quarter 1 Module 13: Develop a Personal Plan to Enhance Brain Functions First Edition, 2021

Republic Act 8293, section 176 states that: No copyright shall subsist in any work of the Government of the Philippines. However, prior approval of the government agency or office wherein the work is created shall be necessary for exploitation of such work for profit. Such agency or office may, among other things, impose as a condition the payment of royalties.

Borrowed materials (i.e., songs, stories, poems, pictures, photos, brand names, trademarks, etc.) included in this module are owned by their respective copyright holders. Every effort has been exerted to locate and seek permission to use these materials from their respective copyright owners. The publisher and authors do not represent nor claim ownership over them.

Published by the Department of Education Secretary: Leonor Magtolis Briones Undersecretary: Diosdado M. San Antonio

Development Team of the Module						
Writers: Minerva B. Villan						
Editors: Georgenia C. Jepa						
Reviewers: Sherelyn N. Mijares, Jean L. Reyes, Darwin D. Bargo, Jonathan L. Canales,						
Shenn Ann G. Arriola, Aira Myr T. Marbibi, Bernadette B. Patag						
Illustrator: Gilbert R. Esguerra						
Layout Artist: Diana F. delos Santos, Carla D. Español						
Management Team: Francis Cesar B. Bringas						
Job S. Zape Jr.						
Ramonito Elumbaring						
Reicon C. Condes						
Elaine T. Balaogan						
Fe M. Ong-ongowan						
Christopher R. Diaz						
Juan R. Araojo, Jr.						
Cristina C. Salazar						
Priscilla V. Salo Bornadotto B. Batag						
Bernadette B. Patag Rosanito S. Paras						
Rochene I. Garcia						

Printed in the Philippines by _____

Department of Education – Region IV-A CALABARZON

Office Address:	Gate 2 Karangalan Village, Barangay San Isidro, Cainta, Rizal
Telefax:	02-8682-5773/8684-4914/8647-7487
E-mail Address:	lrmd@deped.gov.ph

Personal Development Quarter 1 – Module 13: Develop a Personal Plan to Enhance Brain Functions



Introductory Message

This Self-Learning Module (SLM) is prepared so that you, our dear learners, can continue your studies and learn while at home. Activities, questions, directions, exercises, and discussions are carefully stated for you to understand each lesson.

Each SLM is composed of different parts. Each part shall guide you stepby-step as you discover and understand the lesson prepared for you.

Pre-tests are provided to measure your prior knowledge on lessons in each SLM. This will tell you if you need to proceed on completing this module or if you need to ask your facilitator or your teacher's assistance for better understanding of the lesson. At the end of each module, you need to answer the post-test to self-check you're learning. Answer keys are provided for each activity and test. We trust that you will be honest in using these.

In addition to the material in the main text, Notes to the Teacher are also provided to our facilitators and parents for strategies and reminders on how they can best help you on your home-based learning.

Please use this module with care. Do not put unnecessary marks on any part of this SLM. Use a separate sheet of paper in answering the exercises and tests. And read the instructions carefully before performing each task.

If you have any questions in using this SLM or any difficulty in answering the tasks in this module, do not hesitate to consult your teacher or facilitator.

Thank you.



What I Need to Know

This material was crafted to give you – learners, the right amount of assistance for you to absorb and acquire all the necessary concepts and nature comprising oneself. Lessons are bounded on the performance and content standard, learning competencies and level of the learners. This also used languages appropriate to the understanding of the varied types of students' learning acquisition. Sequence of lessons adhered to the arrangement of the competencies as reflected on the DepEd's curriculum guide for this course.

Here, you will learn more things about the brain as the command center of the nervous system. The parts of the human brain have different functions of their own. In this lesson, you will explore activities that will enhance your brain power. You will also learn amazing facts that would improve your brain functions. You will as well be expected to develop a plan to do because once the brain is capacitated with positive thoughts and made your mind with positive conviction it is possible to create a brand new you. The more experience the human brain has, the smarter it gets. The lessons are arranged to follow the standard sequence of the course. But the order in which you read them can be changed to correspond with the textbook you are now using.

This lesson is entitled: Develop a Personal Plan to Enhance Brain Functions.

After going through this module, you are expected to:

- 1. Explain the different brain functions.
- 2. Appreciate the importance of mind mapping as a tool to enhance brain functions.
- 3. Develop a personal plan to enhance brain functions



What I Know

A. Fact or Bluff Statement

Analyze the concept of the following statements about the brain. Write **FACT** or **BLUFF** in each blank provided in each number accordingly.

- _____1. The brain is actively internalizing and evaluating information during silence.
 - 2. Your brain's health is a product of your daily habits.
- _____ 3. Your brain never rests.
- _____ 4. You can change your brain.
- 5. Anything that makes you really comfortable is good for your brain.

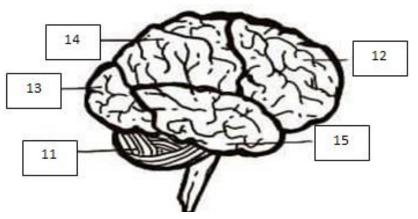
B. Sequencing

There are five steps in writing a Personal Development Plan, rearrange them accordingly: Write LETTER **A** for the first step, **B**, **C**, **D**, and letter **E** respectively.

- _____6. Appreciate the suggestions of your mentors to reach that certain goal
 - _____7. Be prepared with your goals.
- 8. Improve your plan. If possible, include all factors affecting such plan.
- _____9. Need to apply more strategies and recommendations in mind mapping to make the mind map easy.
- 10. Remember to recognize your skills, traits and strengths.

C. Brain function

Based from the illustration, label and describe the function of the different parts of the brain.



Illustrated by: Gilbert R. Esguerra

Lesson 13



"The brain is a muscle, it needs exercise and training."

Enhance Brain Functions

Understanding the powers of the mind can help you develop your brain functions in the middle and late adolescence stages of development. The learning adaptation of every learner varies, and so you are expected to come up with a personal developmental plan to best cope with your own pace of learning towards enhancing your brain functions.

Developing a Plan to

Mind Mapping is an effective way of getting information when developing plans to enhance your brain functions. All Mind Maps have some things in common. They have a natural structure starting from the center of the map. The use of lines, symbols, words, color and images are highly recommended. Mind mapping makes information into a colorful, memorable and highly organized diagram that works in line with your brain natural way of doing things.



Let us begin this lesson by letting you assess your learning about the previous topics on Powers of the Mind, specifically on the parts and functions of the human brain.

A. Choose the letter of the best answer. Encircle the letter of the correct answer

1. There are four main regions of the brain. Among them which region interprets information from the outside world, and embodies the essence of the mind and soul?

A. Brain	C. Cerebellum
B. Brain Stem	D. Cerebrum

2. According to Roger Sperry, the left hemisphere of the brain was responsible for language understanding and articulation.

A. False	C. Irrelevant
B. Maybe	D. True

3. It is the largest part of the brain and is composed of right and left hemispheres.

A. Brain	C. Cerebellum
B. Brain Stem	D. Cerebrum

- 4. It is a part of the brain that coordinates muscle movements, maintain posture, and balance.
 - A. Brain B. Brain Stem

C. Cerebellum D. Cerebrum

5. Right-brained people have unique traits or characteristics. Which trait is NOT included to a right-brained people?

A. Emotional	C. Intuitive
B. Holistic	D. Logical

- 6. Which trait is NOT included to a left-brained people? A. Analytical C. Linear
 - B. Imaginative D. Subjective
- 7. The human brain is larger in relation to body size than any other brains. What is the weight of the human brain?
 - A. 3.3 Pounds (1.5 Kilograms)
 - B. 3.3 Ounces (85 Grams)
 - C. 3.3 Tons (2.7 Metric Tons)
 - D. 3.3 Kilograms (6.6 Pounds)
- 8. What is the biggest part of the brain?

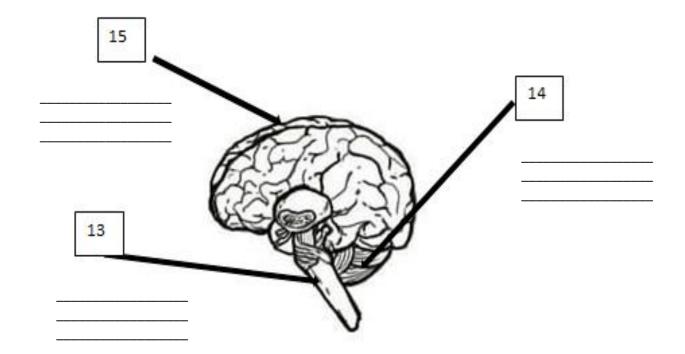
A. Brain	C. Cerebellum
B. Brain Stem	D. Cerebrum

- 9. Which part of the brain helps keep your balance, so you don't fall flat on your face?
 - A. Cerebellum C. Pituitary Gland
 - B. Medulla Oblongata D. Spinal Cord
- 10. Which part of the brain helps to judge, plan, and solve problem? A. Frontal Lobe B. Occipital Lobe D. Temporal Lobe
- 11. Which part of the brain interprets signals from vision, hearing, motor, sensory and memory?

A. Frontal Lobe	C. Parietal Lobe
B. Occipital Lobe	D. Temporal Lobe

- 12. Which part of the brain interprets vision (color, light, movement)?
 - A. Frontal Lobe
 - B. Occipital Lobe D. Temporal Lobe

C. Parietal Lobe



B. Study the illustration and label the three main parts of the brain. (3 points)

Illustrated by: Gilbert R. Esguerra



Do you have something in mind? I am sure you are planning to enhance your brain functions. Improving your brain functions for personal development may help your life become productive and successful.

Activity 1

Read and analyze the following lateral puzzles. Do your best to solve them.

- **Puzzle 1** There are six eggs in the basket. Six people each take one of the eggs. How can it be that one egg is left in the basket?
- **Puzzle 2** How could a baby fall out of a twenty-story building onto the ground and still alive?
- **Puzzle 3** A Landlady permitted the students to rent her apartment with the following condition: the student will pay the rent using her 7 GOLDEN CHAIN for her 7 days stay at her apartment, she is only allowed to cut the chain twice but the student is obliged to pay one chain daily for 7 days. How is it possible?

Activity 2

Fill out the table with its necessary inputs to develop your plan towards enhancing your brain functions. Enumerate as many as you can.

What is your personal idea about brain functions?	Enumerate steps on how to write developmental plan.	What are the ways to enhance your brain functions?

PERDEV Chart



What is It

Why Do You Need a Plan? The reason you need a personal development plan is that making a good plan will help you to make better decisions and remind yourself where you want to go especially in enhancing one's brain. Good preparation and early identification of goals increases the probability of success.

A **personal development plan** is a framework that is required for senior high school students to work out with to track one's self-improvement. It is something that makes you do before the end of the day. Having a developmental plan helps you direct your path towards becoming a holistic adolescent. A personal development plan is your guideline for your life and your future success.

Characteristics of a good plan

- 1. **P**lan provides focus;
- 2. Let you map out a path towards your version of success;
- 3. Allows you to make better decisions;
- 4. Never permits you from taking backwards steps.
- 5. **S**trategies should be on track when things go wrong.

Writing a Personal Development Plan

These are five steps in writing a Personal Development Plan:

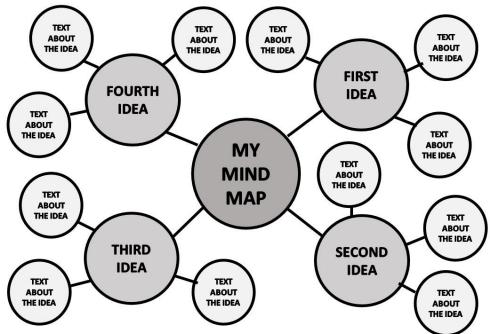
- 1. **B**e prepared with your goals.
- 2. **R**emember to recognize your skills, traits and strengths.
- 3. Appreciate the suggestions of your mentors to reach that certain goal.
- 4. Improve your plan. If possible, include all factors affecting such plan.
- 5. Need to apply more strategies and recommendations in mind mapping to make the map easy.

What is Mind Mapping?

The mind map is the external mirror of your own radiant or natural thinking facilitated by a powerful graphic process, which provides the universal key to unlock the dynamic potential of the brain.

One simple way to understand a Mind Map is by comparing it to a map of a city. The city center represents the main idea; the main roads leading from the center represent the key thoughts in your thinking process; the secondary roads or branches represent your secondary thoughts, and so on. Special images or shapes can represent landmarks of interest or particularly relevant ideas.

The great thing about mind mapping is that you can put your ideas down in any order, as soon as they pop into your head. You are not constrained by thinking in order. Simply, throw out any and all ideas, then worry about reorganizing them later.



This is the example of mind map

How to Draw a Mind Map?

Mind Maps were popularized by author and consultant, Tony Buzan. They use a two-dimensional structure, instead of the list format conventionally used to take notes. This makes information easier to remember, as it's held in a format that our minds find easy to recall and quick to review.

Also known as brain mapping, this process allows you to visualize inside the brain and identify very clearly the irregular brainwaves that cause neurological issues. From that brain map, a report is generated for each patient that shows the areas of dysfunction and the protocols recommended to address them.

Steps in creating mind map

Step 1. Main topic

Write the title of the subject or project that you're exploring in the center of a page and draw a circle around it, as shown in figure 1, below.



Figure 1

Step 2. Sub-topics:

Draw lines out from this circle as you think of subheadings of the topic or important facts or tasks that relate to your subject. Label these lines with your subheadings. (See figure 2, below.)

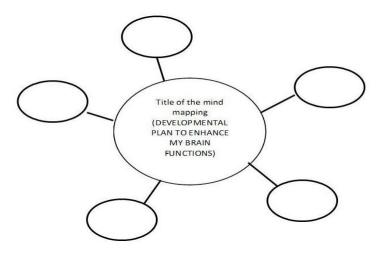


Figure 2

Step 3. Elements

Dive deeper into the subject to uncover the next level of information related sub-topics, tasks or facts, for example). Then, link these to the relevant subheadings. (See figure 3, below.)

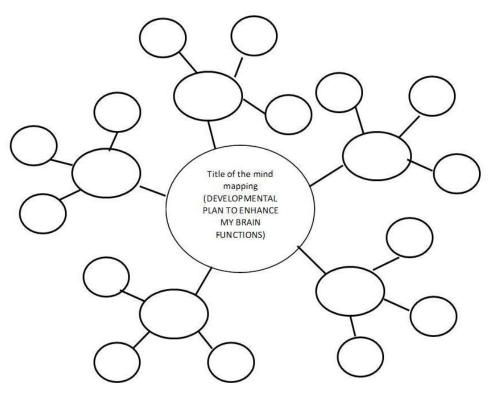


Figure 3

Guide for the students:

Based from the presented steps in making mind mapping, have you thought of a topic that would interest you to explore?

Step1. Write your *main topic* at the middle of the circle,

• Example of topic: Plan to enhance my Brain Functions

Step 2. Think of *subtopics* connected to the main topics. You can enumerate the different activities of the left and right brain inside the next circles.

• Example of sub-topic: Drawing

Step 3. Do the same thing just to be very specific of the *elements* or concepts that describe your sub-topics. You can write keywords that describe each activity in the next series of circles.

o Example of element: Poster-making Contest

Process Questions:

- 1. What are the steps in making mind map?
- 2. Why is it important to follow the steps in mind mapping?
- 3. How is it possible to enhance mind mapping activities? Are there some strategies and recommendations that might help you in mind mapping?

Some more strategies and recommendations used in brain mapping:

- **Use colors, drawings and symbols copiously.** Be as visual as you can, and your brain will thank you. I've met many people who don't even try, with the excuse they're "not artists". Don't let that keep you from trying it out!
- Keep the topics labels as short as possible, keeping them to a single word or, better yet, to only a picture. Especially in your first mind maps, the temptation to write a complete phrase is enormous, but always look for opportunities to shorten it to a single word or figure your mind map will be much more effective that way.
- **Vary text size, color and alignment**. Vary the thickness and length of the lines. Provide as many visual cues as you can to emphasize important points. Every little bit like changing the text font, size, color and alignment helps engaging one's brain.

Mind Maps are useful for:

- Brainstorming individually and as a group
- Summarizing information
- Taking notes.
- Consolidating information from different sources.
- Thinking through complex problems.
- Presenting information clearly.
- Studying and memorizing information.



There are different activities and exercises that you can do to enhance both the right and left hemisphere of the brain. Follow the instructions below to improve your drawing and writing skills.

A. Make a 'Slogan-Poster' about the theme: "<u>*The brain is a muscle, it needs*</u> <u>*exercise and training*</u>" to enhance your **drawing** skills. You may use a separate sheet of paper.

Slogan – Poster Making: "<u>The brain is a muscle, it needs exercise and</u> <u>training"</u>

B. Write an essay about the topic: '*Which way to go*?' to enhance your **writing** skills. You may use a separate sheet of paper.

Essay Writing: 'Which way to go?'



What I Have Learned

Activity: Yes or No Statement

Carefully analyze each developmental concept on enhancing the brain functions. Write \underline{Yes} if you agree with the concept conveyed, and write <u>No</u> if you disagree with it.

- _____1. Mind power is one of the strongest and most useful powers you possess.
 - _____2. Your mind mapping ability may not enhance your brain functions.
 - ____3. Left brain controls all the muscles on the right-hand side of the body and the right brain controls the left side. One hemisphere may be slightly dominant, as with left- or right-handedness.
 - _4. Everybody is not expected for a better and smarter brain, the reason why there is no need to enhance brain functions.
 - 5. Always understand your dominant brain type, you may be able to adjust your study methods, and perhaps shape your schedule and coursework, to suit your own personality type.

11

- _6. Remember that mind mapping is a highly effective way of losing information in and out of your brain. Mind mapping is not in any way a creative and logical means of note taking and note-making that literally "maps out" your ideas.
- ____7. New Mind Maps examples were popularized by author and consultant, Tony Buzan.
- ___8. Improving and following the steps in mind mapping will guide your mind map connected to each other.
- ___9. Need to apply more recommendations in mind mapping to make the mind map easy. They are the use of colors, drawings, and symbols, keeping the topic label, as much as possible, short, and vary text size.
- 10.Getting and learning information such as the brain facts and enhancing our brain functions leads full 'Powers of the Mind'.



What I Can Do

Activity: Picture Mapping

A. Directions: The following picture map depicts some activities that help you develop your brain functions. Analyze the pictures and identify it accordingly as indicated. Select the letter among the choices written from A-Z. (freepik.com)

2	3	4	5
7 FOCUS	8	9	
12		14	15

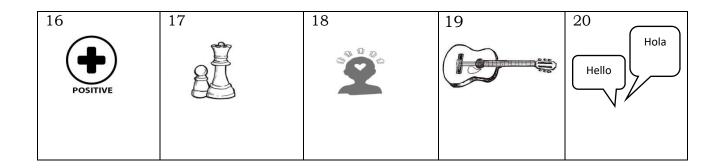


Figure 7 Daily Developmental Plan to Enhance Brain Functions Illustrated by: Gilbert R. Esguerra

A. Sports	В.	Compose and sing	C. Communicate
D. Read books	E.	Write, write and write	F. Instruments
G. Exercise daily	Н.	Eat healthy foods	I. Solve Math puzzles
J. No to vices	K.	Get Sunlight in the morning	L. Love begets love
M. Smile and be happy	N.	Improve your focus	O. Keep positive
P. Learn a second language	Q.	Do mind games	R. Meditate /Yoga
S. Memorize	Т.	Pray	

Note: Choose your answer. Write the letter that describes the picture inside each box above.

No.	Answers (letters only)	No	Answers (letters only)	No.	Answers (letters only)
1		8		15	
2		9		16	
3		10		17	
4		11		18	
5		12		19	
6		13		20	
7		14			

13

B. Activity Planning

This activity shows a 20-day developmental planning. Make a 20-day Activity Plan using the following pictures of activities that may enhance your brain functions. Look at the example below.

Date	Activity/ies	Remarks (Daily, weekly or state it how often.)
Day 1	Pray & Meditate	Daily
Day 2		
Day 3		
Day 4		
Day 5		
Day 6		
Day 7		
Day 8		
Day 9		
Day 10		
Day 11		
Day 12		
Day 13		
Day 14		
Day 15		
Day 16		
Day 17		
Day 18		
Day 19		
Day 20		

Time and Activity Plan (20-day)



Concept Development

Choose the best word inside the parenthesis () to complete the concept of the following statement about developing a plan to enhance brain functions. Write your answer on a separate sheet of paper.

- 1. Mind (**ability**, **power**) is one of the strongest and most useful powers you possess.
- 2. Your mind mapping ability (declines, enhances) your brain functions.
- 3. Left brain controls all the muscles on the right-hand side of the body and the (**left, right**) brain controls the left side. One hemisphere may be slightly dominant, as with left- or right-handedness.
- 4. Everybody is expected for a better and smarter brain, the reason why there is a need to enhance brain (**development, functions**).
- 5. Always understand your dominant brain type, you may be able to adjust your study methods, and perhaps shape your schedule and coursework, to suit your own (**mind, personality**) type.
- 6. Remember that Mind mapping is a highly effective way of getting information in and out of your brain. Mind mapping is a creative and logical means of (**hand writing, note taking**) that literally "maps out" your ideas.
- 7. New Mind Maps examples were popularized by author and consultant, Tony (**Buzan, Biazon**).
- 8. Improving and following the steps in mind mapping will (**guide, include**) you in keeping you mind map connected to each other.
- 9. Need to apply more recommendations in mind mapping to make the mind map (**easy, hard**). They are the use of colors, drawings, and symbols, keeping the topic label, as much as possible, short, and vary text size.
- 10. Getting information such as the brain (**facts, parts**) and enhancing our brain functions leads to a maximum 'Powers of the Mind'.

B. Multiple Choice.

Choose the letter of the best answer. Encircle the letter of the correct answer.

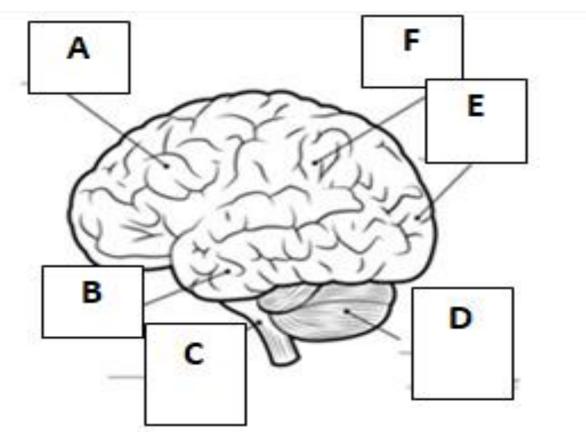
11. In mind mapping, you can enhance it through the use of the following. Which is not included in the group?

A. Color	C. Philippine map
B. Drawing	D. Symbols

- 12. There are different ways to enhance brain functions. Which is not included in the group?
 - A. Get plenty of sleep C. Improve your focus

B. Have time to read more D. Learn just one language

- 13. Look at the mind illustration below. Which one is the Frontal lobe? A B C D
- 14. Look at the mind illustration below. Which one is the Temporal lobe? A B C D
- 15. Look at the mind illustration below. Which one is the Brain Stem? A B C D

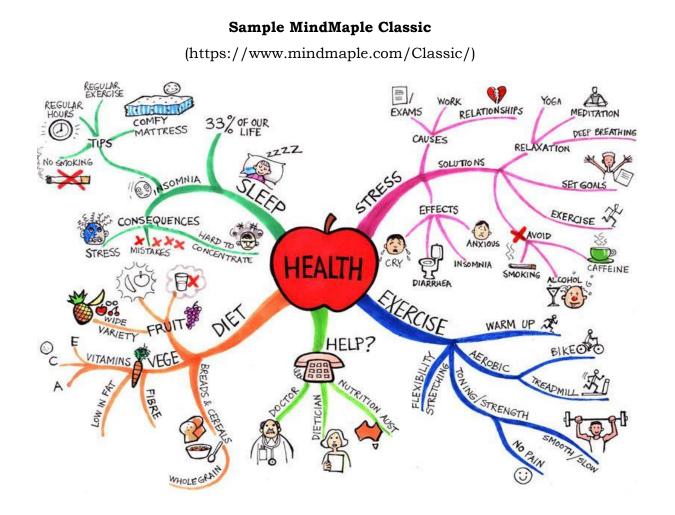


Illustrated by: Gilbert R. Esguerra



Additional Activities

Mind Maple Classic: A suggested online link that you can use to personalize your mind maps with colors, images, and pictures. Here's look and try **MindMaple Classic** to increase your creativity of organizing thoughts and ideas about certain topics.



Activity

Use this Mind Maple Classic to mind map the topic, "*My Personal Goal as an Adolescent.*" Show and express your ideas creatively through drawings, colourful images just like the given example above. You may use a separate sheet of paper.

MY MIND MAP (Mind Maple Classic) Title: "My Personal Goal as an Adolescent."



Fact	¥		
wonX I JadW	nl s'tadW		
əurT əsla¶ əurT əurT əurT əurT əurT əurT	Enhances Right Personality Note taking Buzan Guide Caide Pacts C C C C C C C		
What's More:	Assessment Power		

19

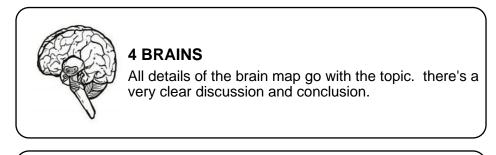
A Brain stem
Ċ
D
В
A D
D
C D
D
What's In What I Ki
51

0

-

CATEGORY	4	3	2	1
Format	Mind map follows the branch or hook format.	Mind map partially follows the branch or hook format.	Mind map follows another format, such as bubbles, circles, boxes, lines, etc.	Mind map does not consistently follow any format or is chaotic and difficult to understand.
Color	The mind map uses a different color for each branch. The mind map is brightly colored.	The mind map uses different colors for some branches, or the colors are drab.	The mind map is not completely colored.	The mind map is not colored.
Content	The mind map includes the MAJOR points of the material.	The mind map misses some major points of the material.	The mind map misses most major points of the material.	The mind map presents no major points.
Verbosity	The mind map presents only one word or name per branch or hook.	The mind map presents multiple words or names on some branches.	The mind map presents multiple words or names on many branches.	The mind map presents multiple words or names on most or all branches.
Radiance	The mind map radiates from the center of the page. Ideas branch out from other ideas in a logical and organized manner.	The mind map radiates from a central point. Some ideas branch out of other ideas; some branches are a single line extending from the center.	The mind map radiates from a central point. Few ideas branch out of other ideas; most branches are a single line extending from the center.	The mind map radiates from a central point. No ideas branch out of other ideas; all branches are a single line extending from the center. OR: The mind map does not radiate from a central point.
Illustrations	The mind map includes at least relevant 6 illustrations. The illustrations make the mind map memorable.	The mind map includes at least 4 relevant illustrations. The illustrations make the mind map memorable.	The mind map includes at least relevant 2 illustrations. The illustrations make the mind map memorable.	The mind map includes no relevant illustrations, or the illustrations do not make the mind map memorable.
Neatness	The mind map is very neat and orderly. The mind map is clearly readable.	The mind map is somewhat neat and orderly. The mind map is clearly readable.	The mind map is not very neat and orderly. The mind map is readable.	The mind map is not readable. (This may affect other portions of the grade).

Mind Map Rubric Mind Map Picture Rubric





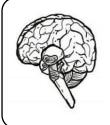
3 BRAINS

Many details of the brain map go with the topic. There's a cleasr discussion and conclusion.



2 BRAINS

Few details of the brain map go with the topic. There's a quitecleasr discussion and conclusion.



1 BRAIN

Details of the brain map do not go with the topic. There's no cleasr discussion and conclusion.

References:

- Mayfield Brain & Spine 3825 Edwards Road Suite 300, Cincinnati, Ohio 45209 https://mayfieldclinic.com/pe-anatbrain.htm
- Mind Tools" is a registered trademark (International Registration Number 1193379, US 4,566,696, EU 012473377, Australia 1608561, New Zealand 993356) of Emerald Works Limited.
- Diane Beck and Evalina Tapia, The Brain, Open Educational Resources Commons 2017: accessed May 22, 2020, https://www.oercommons.org/courses/the-brain-2

Internet links

https://www.oercommons.org/search?f.search=BRAIN+FUNCTIONS&f.general_subject=&f.sublevel=&f.alignment_standard=

https://www.oercommons.org/courseware/lesson/15117/overview

http://rubistar.4teachers.org/index.php?screen=ShowRubric&rubric_id=1095617 & Rubrics

https://uwisdom.in/mind-mapping-techniques/. Additional activities

http://mrbakinsesl.pbworks.com/w/page/12702992/Cluster%20Diagrams%20for %20Writing

For inquiries or feedback, please write or call:

Department of Education - Bureau of Learning Resources (DepEd-BLR)

Ground Floor, Bonifacio Bldg., DepEd Complex Meralco Avenue, Pasig City, Philippines 1600

Telefax: (632) 8634-1072; 8634-1054; 8631-4985

Email Address: blr.lrqad@deped.gov.ph * blr.lrpd@deped.gov.ph