

# SEMESTA BILINGUAL SECONDARY SCHOOL 2 SEMARANG

Jl. Jangli Gabeng no.1 Tembalang, Kota Semarang

**BIOLOGY** 

# **LESSON PLAN**

CLASS/ SEMESTER	7/2 (online learning with Zoom apps)	DATE	10 April 2020
TEACHER & EMAIL	Qurrota A'yun gurota@semestaschool.sch.id	DURATION	1x40 minutes

TOPIC	2. FOOD & DIGESTION		
SUB TOPIC	2.1 NUTRIENTS		
OBJECTIVES	Students are able to:  ✓ State and explain seven different types of nutrients after discussing the topic with teachers and peer.  ✓ Give examples and identify which food contains different types of nutrients after doing a worksheet.  ✓ Test foods whether contains carbohydrate or not after doing an experiment.		
CHARACTER BUILDING	Thank God, Responsibility, Discipline, and Honesty		

ACTIVITIES	METHODS	
Pre-activities/ Warm up 5 minutes	<ol> <li>Teacher open the class (greet students, check an attendance, and pray together).</li> <li>Teacher catch students' attention by giving an apperception.         Apperception by presenting pictures of breakfast around the world, and asking them What your today's breakfast menu? Do you think is it healthy food? What should you eat for breakfast? Should be lot of rice or just a milk and biscuit?     </li> <li>Teacher tell the objectives of the learning process.</li> </ol>	
Main Activities 30 minutes	<ol> <li>Teacher brief a material about nutrients by presenting powerpoint slides (7 minutes)</li> <li>Teacher and students discuss related to the students' daily menu (7 minutes)</li> <li>Teacher give an online quiz for measuring student's understanding about the topic they have learned (7 minutes)</li> <li>Teacher give a review or feedback of the quiz (5 minutes)</li> <li>Teacher give an information about project based learning for students (4 minutes)</li> </ol>	
Closing 5 minutes	<ol> <li>Teacher give a conclusion of today's learning process.</li> <li>Teacher close the class and praying together.</li> </ol>	

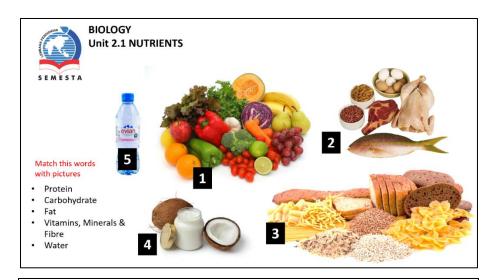
REFERENCES	Cambridge Checkpoint Science Coursebook 8 (author : Mary Jones, et.al), Internet	
EQUIPMENTS/ MEDIA	Laptop/ chromebook, material in powerpoint (attached), sample of foods & drinks, iodine solution (betadine), plates and labels	
ASSESSMENT	Attached	

SEMESTAL NUMBERSCHIPPING SEMESTAL NUMBERSCHIPP

Semarang, April)10, 2020 Subject leacher

Qurrota A'yun, S.Pd

# **Material Powerpoint**



Carbohydrate: Provide energy

Protein: Making new cells & making enzyme

Fat: Making cell membranes, provide energy

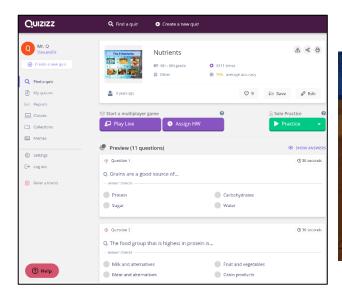
Fibre: Helps to keep food moving easily through the digestive system

Vitamin, mineral: Boost the immune system,

Meat, fish, eggs and other protein sources

Vitamin, mineral: Boost the immune system, support normal growth and development, and help cells and organs do their jobs

## **Online Quiz**



# **Online Meeting**

Foods and drinks high in fat and/or sugar



### Sample of Experiment Assessment Paper



#### TESTING CARBOHYDRATE

Biology 7A-7B (Unit 2.1)

Name: Alesha Adeeva Azra

#### Background:

Carbohydrates are the body's most important and readily available source of energy. It can be found in foods such as starchy vegetables, grains, rice, and breads and cereals.

#### Purpose:

To investigate the presence of carbohydrates in various food products.

- 1. At least 7 (seven) different food products (rice, cake, noodles, kinds of fruits, kinds of vegetables, milk, snacks)
- 2. "Betadine" solution
- 3. Plates
- 4. Stationary
- 5. Camera smartphone

#### Methods:

- 1. Place a sample of each food into a plate. Test similar amounts of each food.
- 2. Place a few drops of "Betadine" solution on each food.
- 3. Make observations immediately.
- 4. Wait a few more minutes and note any other changes.

#### Keypoint:

The darker of the colour in each sample after you drop Betadine, the more carbohydrates contain in that food.

#### Observations:

Complete this table,

Did food Food product change its colour?		change its	What colour of the food after you dropped Betadine?	
1	Ice cream	No	-	
2	Biscuit	Yes	Dark blue/purple	
3	Sweet potato	Yes	Dark blue/purple	
4	Egg roll	Yes	Dark blue/purple	
5	Rice	Yes	Dark blue/purple	
6	Cheese	Yes	Dark blue/purple	
7	Donut dough	Yes	Dark blue/purple	

#### Conclusion:

Make a list of the food you've tested. Sort them from the darkest colour. 1. donut dough

- 2. Biscuit
- 3. Egg roll
- 4. Sweet potato
- 5. rice
- 6. Cheese
- 7. Ice cream

#### Questions:

1. What is the function of carbohydrate?

Answer: Carbohydrate give us energy

2. What the bad effects if we consume carbohydrate too much?

Answer: We will get diabetes

3. Which one will you choose to give you more energy, rice or

noodles? Why?

Answer: rice, rice have more carbohydrate