

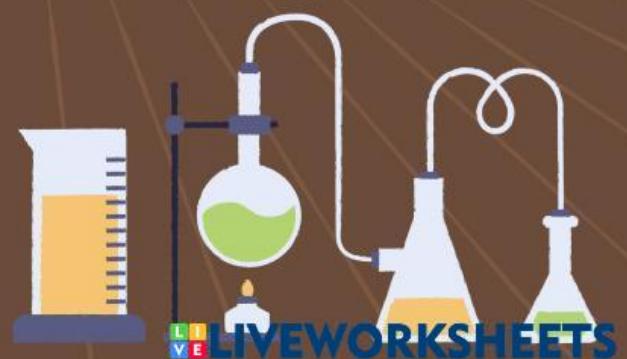
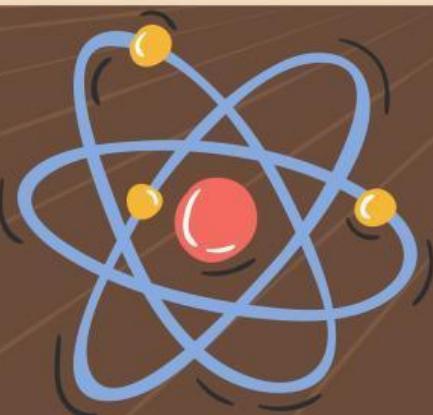


STUDEN'S WORKSHEET

ANALYSIS OF CONTEXTUAL PROBLEMS AND PRACTICE QUESTIONS CONCERNING DANGEROUS ADDITIVE AND ADDICTIVE SUBSTANCES

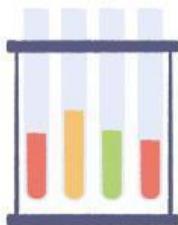
Name:

Class:



Learning objectives

1. Students are able to decide and avoid dangerous additives and addictive substances



Challenging instructions



1. Students are required to read the initial problem description text regarding cases of additives and addictive substances in everyday life and write down the important points contained in the text
2. Students answer several questions regarding cases of contextual problems of additive and addictive substances in the text
3. Students work on several questions regarding additives and addictive substances
4. Students make conclusions about the dangers of additives and addictive substances



ADDITIVES SUBSTANCE

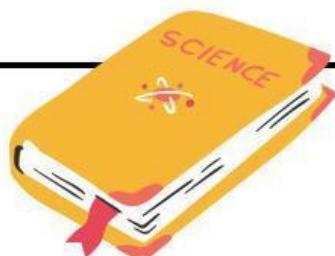


A) Read the following text carefully!

Attractive packaging for snacks really makes young children interested in consuming them. However, the snack often called Snack apparently contains dangerous additives if consumed excessively by children. Parents need to supervise their children so that they do not become addicted to these foods, especially during the current school holiday season. The additives added to Snack food aim to enhance the taste, enhance the appearance and preserve the food for a certain period of time. The types of additives used are very diverse. In fact, minerals and vitamins are also part of the additives. Both are often added for reasons to maintain and increase the nutritional value of food.

Some food additives that need to be avoided are as follows. First, Monosodium Glutamate (MSG). Snack that children need to avoid are those that contain MSG. Children need to avoid this sodium additive. Many school-aged children consume more sodium than recommended. According to the CDC report in the journal The Academy of Nutrition and Dietetics, November 2016 edition, the recommended sodium intake for children ranges from 1,900 mg/day to 2,300 mg/day depending on age. However, from the results of the national nutritional health examination survey, the sodium consumed exceeded the limit, namely 3,256 milligrams.

Second, food preservatives. The next additive content that needs to be avoided is food preservatives such as benzoate, nitrates and sulfites. This means that if consumed excessively it will affect children's health. The side effects of using these additives include triggering cancer, increasing the danger of oxidation, allergic reactions, and increasing appetite in children, resulting in obesity.



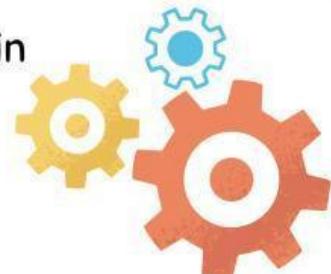
Third, artificial sweeteners. Artificial sweeteners are often found in sweet foods such as chewing gum, cereal and jelly as well as fizzy drinks. The artificial sweetener is aspartame which can trigger cancer if consumed excessively. Apart from that, consuming too much aspartame can also make consumers feel depressed and have mood disorders. The impacts include making children easily emotional and having tantrums.

Fourth, high fructose corn syrup. Fructose corn syrup is a sweetener that is often found in packaged food and beverage products, such as soft drinks, sweet cakes and candy. According to several studies, if fructose corn syrup is consumed excessively it can reduce the function of the insulin hormone and increase blood pressure and obesity.

Fifth, sodium nitrate. The additive sodium nitrate is a substance used as a food preservative, coloring agent and flavoring agent. When this substance is heated, sodium nitrate will turn into nitrosamine. This substance is considered to trigger the risk of cancer in the digestive tract.

B) Write down several important points contained in Additives text !

(Minimum 5 Points)



1

many Snack food's seller adding the additive substances to enhance the taste and the appearance and preserve the food for a certain period of time.

2

Children need to avoid this sodium additive. Many school-aged children consume more sodium than recommended

3

additive content that needs to be avoided is food preservatives such as benzoate, nitrates and sulfites. This means that if consumed excessively it will affect children's health

4

The artificial sweetener is aspartame which can trigger cancer if consumed excessively and make consumer depressed and make bad mood

5

if fructose corn syrup is consumed excessively it can reduce the function of the insulin hormone and increase blood pressure and obesity.

C) Answer the following questions correctly!

1. What are the main points of discussion in the text above?

The main point of the text are describe how dangerous the snack food which contains the additive substances



2. State the purpose of adding additive substances to food!

To enhance the taste, the appearance and preserve the food for a certain period of time.

3. What happens if we eat foods that contain lots of additives?

Our body will affect some disorders include triggering cancer, increasing the danger of oxidation, allergic reactions, and increasing appetite that resulting in obesity. also some physiologies disorders like feeling depressed and disturb the hormone

3. Mention the various types of additives that are harmful to the body!

Monosodium Glutamate (MSG), food preservatives, artificial sweeteners. high fructose corn syrup and sodium nitrate

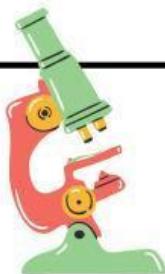
4. What is the strategy for choosing healthy foods to avoid the bad effects of additives?

There are some strategy, such as before we buy the product better we see the food information on the product packaging, increase consuming fruit and vegetables, and avoid fast avoid

D) Draw conclusions regarding additives!

Based on the knowledge I have obtained, it can be concluded that we must avoid the food which contains additives substances because it will impact on our body health and caused some disorders like cancer and digestive disease

ADDICTIVE SUBSTANCE



B) Read the following text carefully!

Drug abuse is currently still a national problem. The State has not yet lifted the drug emergency status. If drugs are consumed and abused, they can affect mental conditions, thoughts, feelings and behavior. Not only that, drugs can also make the user addicted. There are quite a lot of types of this addictive substance, and all of them are dangerous. So people are expected not to try consuming drugs.

At the end of the 19th century, in 1895, Heinrich Dreser, who worked for the Bayer company, Germany, succeeded in formulating morphine with acetyl, the result of which he named heroin. The name heroin is taken from the German word *heroisch* which means heroism. For three years after this type of narcotic was discovered, heroin was not produced commercially. The appearance of heroin in 1898 as a cough syrup.

Then this heroin was intended to treat acute morphine addicts in America. An increase in cases of morphine addiction has been seen since the introduction of this addictive substance at the end of the 19th century. Medical and chemical experts then studied this problem. The conclusion is that the diacetylmorphine contained in heroin has the potential to cause a greater dependence effect than morphine. They stated that when heroin enters the body's metabolism, the active heroin substance immediately combines into the bloodstream and enters the brain, causing euphoria. The addictive effect of heroin is said to be two to four times greater than that of morphine. The availability of heroin throughout the world cannot be separated from the production of opium crops in the Golden Triangle (Thailand, Laos, Myanmar) and the Golden Crescent region (Afghanistan, Iran and Pakistan).

In its development, the younger generation of Indonesia is using the narcotic type heroin but with low quality, or what is called putaw. Putaw is the name for heroin, because its color is brownish white and how to use putau, it can be smoked and injected. Other names for heroin are Pt, diacetyl, morphine, smack, dope, horse.

Heroin is a type of semi-synthetic opioid. In the form of granular white powder and liquid. It has a bitter taste that has pain relieving properties. Heroin is made from morphine, which is an ingredient that comes from the opium plant. Pure heroin is a white powder, but what is circulating on the black market is brownish because it is mixed with other ingredients. Therefore, the purity levels of heroin on the black market vary. Immediately after using heroin, the pupils constrict, nausea, vomiting, dry throat, inability to concentrate and apathy (indifference) occur. Heroin is very addictive, causing great dependence, both physically and psychologically. Tolerance (body adjustment) occurs to heroin so that the dose of heroin used is increased to obtain the same effect on the body. Long-term use of heroin causes various health problems in the body, including drastic weight loss, malnutrition and constipation. Also causes irregular menstruation, impotence, excessive sleepiness and indifference, if the use of the substance is suddenly stopped/the dose is reduced, there will be symptoms of withdrawal or withdrawal, indicated by muscle spasms, tremors (extremities shaking uncontrollably), diarrhea, panic, , runny nose and eyes, shivering, sweating, anxiety, unable to sleep and pain throughout the body. Another danger of using heroin is that if there is an overdose (excessive dose), you can become unconscious and die because your breathing stops.

B) Write down several important points contained in Addictive text !

(Minimum 5 Points)



1

If drugs are consumed and abused, they can affect mental conditions, thoughts, feelings and behavior. Not only that, drugs can also make the user addicted.

2

the diacetyl mophine contained in heroin has the potential to cause a greater dependence effect than morphine. the active heroin substance immediately combines into the bloodstream and enters the brain, causing euphoria.

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the diacetyl mophine contained in heroin has the potential to cause a greater dependence effect than morphine. the active heroin substance immediately combines into the bloodstream and enters the brain, causing euphoria.

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Heroin is a type of semi-synthetic opioid. In the form of granular white powder and liquid. n its development, the younger generation of Indonesia is using the narcotic type heroin but with low quality, or what is called putaw

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after using heroin, the pupils constrict, nausea, vomiting, dry throat, inability to concentrate and apathy (indifference) occur. Heroin is very addictive, causing great dependence, both physically and psychologically.
