

Activities to empower your sections choose what suits you and your sessions:

Activity (1) (sugary debate) (5 min)

- 1- divide class into 2 teams.
- 2- one defend that sugar is beneficial and the other disagree and claims the bad effects.
- 3- have them discuss and search for 2 min
- 4- choose two representatives from each group for the debate.
- 5- extract 5 students out of the two groups.
- 6- they evaluate the debate and choose the winner.
- 7- you as a teacher choose winner also by your vote and students votes.
- 8- claim winner and start lesson.

Activity (2) (5 min)

- 1- show them a photo of sugar in tea.
- 2- what do you think that is?
- 3- Do you think sugar is good for you?
- 4- does sugar have any types?
- 5- hear what they said.

Activity (3) (10 min)

- 1- spread work sheet on them.
- 2- write what type of sugar you think that is
- 3- the fastest to complete work sheet gets a bounce.

Activity (4) (10 min)

- 1- play video anonymously
- 2- what did you understand from it?

- 3- each group write the things he noticed and understood from the video.
- 4- the two groups setting next to each other exchange notes.
- 5- each group chooses a representative from the other group and reads the notes.

Activity (5) (5 min)

- 1- show animation photo about monosaccharide.
- 2- go through the line and ask them what they noticed.
- 3- give examples about mono, dia, polysaccharides from your life.

Activity (6) (10 min)

- 1- spread work sheet for all students.
- 2- connect what you see suitable to the photos shown.
- 3- tell me what each of them used for.
- 4- what is the complexities one from those.

Activity (7) (10 min)

- 1- give them a paragraph individually.
- 2- what did you understand from it.
- 3- how can we use sugars in our capstones.
- 4- search up for previous capstones that used sugars
- 5- how can you link this to your project this term?

Activity (8) (10 min)

- 1- divide the worksheet in groups.
- 2- compare and contrast the structures and functions of simple sugars and complex carbohydrates.
- 3- the group that answers the fastest get a group from its choice to prepare a presentation about lipids.

Activity (9) (10 min)

- 1-Get two boxes of cereal and compare the breakdown of the total carbohydrate they contain.
- 2- How many grams of dietary fiber, sugars and other carbohydrates do they provide? Which is lower in sugar?
- 3-Now, look at the list of ingredients. When does a source of sugar appear in the list of ingredients? Is it listed first, second, third or later in the listing? Ingredients in largest amounts are listed first.
- 4- For the highest nutritive value, select the cereal that is high in other carbohydrate, high in dietary fiber and lower in sugars.
- 5- For more nutritive value, select a cereal that does not give a source of sugar as the first, second or perhaps even the third item listed in the list of ingredients.
- 5- Use this information to help you make informed choices.

Activity (10) (5 min)

- 1- share with them the game link or QR code

<https://www.tv411.org/science/tv411-whats-cooking/carbohydrates-science-lesson/activity/1/1>

- 2- Nutritionists tend to sort foods into groups, “My Plate,” divide foods into five groups: fruits, vegetables, protein, dairy, and grains.
- 3-Drag and drop the food to the group you think it belongs in.
- 4- submit and view what you have done.

Activity (11) (5 min)

- 1-share with them the game link or QR code.

<https://www.tv411.org/science/tv411-whats-cooking/carbohydrates-science-lesson/activity/1/2>

- 2- When we are told to “cut down on carbs,” we usually avoid starchy foods (potatoes, rice, and bread) and sugary foods (cookies and soft drinks). But is that the whole story about carbs?
- 3-Drag and drop the foods that contain carbs onto the plate.

Activity (12) (5 min)

- 1- share with students the game link or QR code.

<https://www.tv411.org/science/tv411-whats-cooking/carbohydrates-science-lesson/activity/1/3>

2- Different foods contain different proportions of sugar and starch. Which food do you think contains more sugar?

3-Which food contains more starch?

4- Drag and drop each food to the right category.

Activity 13 (10 min): Carbohydrate Food Hunt

Materials: Various food items, poster paper, markers

1. Divide the students into small groups.
2. Provide each group with a selection of food items that contain carbohydrates, such as bread, fruits, pasta, cereal, etc.
3. Instruct the groups to examine the food items and identify the type of carbohydrate present in each item (monosaccharide, disaccharide, or polysaccharide).
4. Have the groups create a poster with the food items categorized into their respective carbohydrate types.
5. Ask each group to present their posters to the class, explaining the carbohydrate types and functions of the foods they identified.

Activity 14 (15 min): Building Carbohydrate Models

Materials: Colored construction paper, scissors, glue

1. Explain to the students that they will be creating models of different carbohydrates.
2. Provide each student or group with colored construction paper and scissors.
3. Assign a specific carbohydrate type (monosaccharide, disaccharide, or polysaccharide) to each student or group.
4. Instruct the students to create a visual representation of their assigned carbohydrate type using the construction paper.
5. Encourage them to be creative and include labels or captions that describe the function of their carbohydrate model.
6. Allow time for students to share their models with the class, discussing the structure and function of each carbohydrate type.

Activity 15 (10 min): Carbohydrate Function Skits

1. Divide the students into small groups.
2. Assign each group a specific function of carbohydrates (e.g., energy source, structural component, fiber, etc.).
3. Instruct the groups to prepare a short skit or role-play that demonstrates their assigned carbohydrate function.
4. Encourage creativity and engagement in presenting the skits.
5. After each group performs, facilitate a class discussion to identify and reinforce the different functions of carbohydrates highlighted in the skits.

Activity 16 (10 min): Carbohydrate Debate

1. Divide the class into two groups: one in favor of carbohydrates and their importance, and the other skeptical or opposed to carbohydrates.
2. Instruct each group to research and gather evidence to support their stance.
3. Provide time for the groups to prepare their arguments.
4. Conduct a debate between the two groups, allowing each side to present their case and counter-arguments.
5. Encourage critical thinking and respectful discussion during the debate.
6. After the debate, engage the entire class in a reflective discussion on the different perspectives presented and the overall importance of carbohydrates in our diets.