

**TOPIC: BUTYRIC CARBOHYDRATES- REVISION****AGE GROUP: 16-17 YEARS OLD/ 10 GRADE****TIME: 45 MINUTES****AIMS:**

- To revise and extend students' knowledge of butyric carbohydrates
- To systemize students' knowledge of butyric carbohydrates
- To put into practice the acquired knowledge of the structure, isomerism and chemical properties of the butyric carbohydrates
- To illustrate the connection between the carbohydrates by means of chemical reactions
- To develop students' thinking and imagination by means of different logical operations- synthesis, analysis, comparison, analogy

**Activities:**

Number of Activity	Name of activity	Description of activity	Time
1	Lead in	Lead in questions about the butyric carbohydrates, students see formulas on a Power Point presentation, they have to name the substance and say how it is produced. About each substance (they are 5-6 altogether) from the Power Point presentation the teacher should say something new about the usage of the substance the students have not heard of so far.	5 min
2	Text filling	Each student receives a text with gaps. They have to fill in the gaps by using their knowledge of the structure, isomerism and chemical properties of the butyric carbohydrates. Then they choose one of the carbohydrates that is mentioned in the text and write down the chemical reactions it can take part in. The answers of the students are checked and discussed.	20 min
3	Professor Bromine-interactive activity	Professor Bromine is the greatest chemist and inventor in the world, as well as the craziest and absent-minded scientist ever. Explosions, floods and unexpected surprises are something quite normal for his laboratory. That is why Professor Bromine is urgently looking for an assistant. Students go through the interactive activity and if they do it successfully they are honoured to be the assistants of the professor.	10 min

4	Help the Princess out!	A princess is locked in a castle, the students have to set her free by going through challenges (all connected to the carbohydrates) and when they help the princess out, she will take them to the treasury room of the castle.	10 min
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