


In2steam Lesson Plan (Activity) Template

1. Name of the lesson	<i>Carbonated drinks</i>
2. Target group	7-8 years old
3. Duration	3 hours
4. STEAM Skills/ 21st Century Skills	Design Thinking Collaboration Communication Problem Solving 
5. Expected outcomes	<p>By the end of this unit, students will:</p> <ul style="list-style-type: none"> - be able to deal with personal health education; - know about the ingredients that are part of carbonated drinks, and as consequence being aware of the risk posed by the consumption of these drinks; - know the diseases caused by the consumption of carbon dioxide, while discovering alternatives that satisfy the consumption of juices in a healthy way - set-up a healthy consumption plan for a happy life <p>Therefore, teachers will highlight the ways in which we manage to reduce obesity and all other diseases that can endanger healthy lifestyles</p> <p>The general idea of the activity is: be aware of the risks we are exposed to when we do not have a proper diet, to which is added consumption of carbonated beverages.</p>
6. Subjects and topics covered	Science, physics, arts (creation of a collage to show the composition of carbonated drinks)
7. Methodologies	<input type="checkbox"/> Inquiry based learning
8. Integration of the Arts	Arts are integrated as students will create a collage to show the composition of carbonated drinks
9. Learning Environment	Classroom
10. Required resources	<ul style="list-style-type: none"> • Paper (A4); • Glue; • Coloring materials; • Photos/pictures; • Sugar and fizzy drinks (to be used just for the explanation of the phenomenon) • 1 spoon
11. Prior knowledge a. teacher b. students	<p>a. In order to deliver this activity, the teacher will need to have a good understanding of the Design Thinking methodology. It would also be useful to refresh the knowledge about the danger of fizzy drinks.</p> <p>b. In order to be able to participate and contribute to this lesson, the pupils should already have a basic knowledge of what dangers include fizzy drinks.</p>

<p>12. Detailed description of the step-by-step sequences of the unit, incl. specific activities to support the learning experience</p>	<p>STEP 1: group discussion</p> <ul style="list-style-type: none"> The students start brainstorming about carbonated drink consume and their effects. Starting from questioning themselves how much they like carbonated drinks and how often they consume students will talk and explain their own ideas <p>STEP 2: group searching and the inquiry</p> <ul style="list-style-type: none"> The students search about the carbonated drinks are made from and the bad effects. Bring sugar to the lesson, ask the children to guess how many spoons of sugar there are in a bottle of fizzy drink, then spoon the actual amount of sugar into a cup (e.g. a can of fizzy drink contains about 8-9 teaspoons of sugar) The students can fill in a grid, to identify: a) name of the drink, b) type of the drink, c) my prediction (about how healthy and safe the drink is or is not), d) amount of sugar needed (in grams) <p>STEP 3: group discussion</p> <ul style="list-style-type: none"> The students will collaborate in group of five and they will identify the risk of consuming carbonated drinks. <p>STEP 4: problem solving (for the individuals)</p> <ul style="list-style-type: none"> On a A4 paper every single student will make a plan for stopping the carbonated drinks consume and they will add arguments. Students will be evaluated based on an evaluation grid <p>STEP 5: peer review</p> <ul style="list-style-type: none"> The students will look at the classmates' plan and they will say what they think about it <p>STEP 6: creating a collage</p> <ul style="list-style-type: none"> The students will create a collage in which to present the composition of carbonated drinks. They can use some pictures/photos or even draw/paint, cut and paste their own pictures of the carbonated drinks. <p>STEP 7: classroom presentation</p> <ul style="list-style-type: none"> The class participate at a realization of a poster (printed or online wall) for presenting what they learnt from the activity.
<p>13. Gender-inclusive strategies and activities planned</p>	<p>This activity is meant to be very gender neutral. Do not refer to gender stereotypes when explaining how humans can be affected by fizzy drinks. Ensure that boys and girls are evenly distributed across the groups, so that the final results are not categorised into "boys" and "girls' ideas. When observing the group work, make sure every group member contributes equally (this is also a personality aspect, gender may or may not play a role).</p>
<p>14. Assessment & Evaluation</p>	<p>Teachers can evaluate students based on an evaluation grids, or while using online tools such as Kahoot and all other learning apps.</p>
<p>15. Intellectual property rights (IPR) / Origin of the activity</p>	<p>Lesson planned from Mînzicu Simona Valentina</p>

