

**CODE/MOE/UOIT Makerspaces Project--Lesson Planning Template**

**School Board: CEPEO**

**Grade(s): 5**

**Subject(s): Molecular Cuisine**

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| **BIG IDEAS:**  To follow a “molecular cuisine” recipe, which students will present to judges, using the *Masterchef* format.  **Curriculum Expectations:**  **OVERALL:**  Read various print and electronic texts by putting knowledge of the type of writing and reading strategies at the service of the construction of meaning in various situations.  Produce varied messages, with or without exchange, according to the situation.  **SPECIFIC:**  Prepare (alone or in a group, with or without information and communication technologies [ICT]) various communications structured according to a specific intent, adapting the speech to the targeted audience (eg, interview, broadcast announcement) on the school radio station, creating a commercial featuring the school's mascot.  The recipe: Determine the main idea of each paragraph using key words. | |
| **Learning Goals:**  “We are learning to…”   * Read and follow a recipe * Prepare an oral presentation | **Success Criteria:**  “We will be successful when…”   * We have created molecular cuisine using various recipes * We have presented our creation to the judges in a structured and efficient manner |
| **Lesson Overview:**  By consulting recipe books (hard copies and internet links) students must design a molecular cuisine menu (entrée, main course, dessert or beverage). Once the menu has been selected, students will have to design a menu using augmented reality to give to the judges, along with a 1 minute video showing their recipes’ procedure. The presentation format will be similar to that of "*Master Chef Canada*". The video must demonstrate students’ work in the kitchen, explain the menu, justify their choices. In addition, they will have to prepare a short oral presentation before a jury. | |
| **Materials and Technology:**   * HP Reveal (Augmented reality app) * Software to create flyers * Camera and software for video editing * Tools and ingredients for molecular cuisine | |
| **Student Accommodations/Modifications:** | **Lesson will be differentiated by:**   * **Content, specifically:** Fewer recipes required * **Process, specifically:** Ask another student to film; teacher assistance * **Product, specifically:** Video presentation only (no oral presentation to judges) * **Environment, specifically:**   Students may work in staff kitchen rather than in the classroom |
| **MINDS ON: Getting Started** | |
| During this phase, the teacher may:  • activate students’ prior knowledge;  • engage students by posing thought-provoking questions;  • gather diagnostic and/or formative assessment data through observation and questioning;  • discuss and clarify the task(s). | During this phase, students may:  • participate in discussions;  • propose strategies;  • question the teacher and their classmates;  • make connections to and reflect on prior learning. |
| **Describe how you will introduce the learning activity to your students.**  Following a cooking demonstration in class and viewing various culinary television shows.  **What key questions will you ask? How will you gather diagnostic or formative data about the students’ current levels of understanding?**  Do you like cooking?  Name cooking tools. Name dishes. Name ingredients. Ask them to research various ingredients in molecular cuisine and ask them how these ingredients can be introduced into a kitchen.  Try a "Hangout" with a local chef who practices molecular cooking in his restaurant. (allows students to see an interview, which is also a requirement in the grade 5 curriculum)  **How will students be grouped? How will materials be distributed?**  The students will be chosen at random to create diversity in the teams. The documents will be distributed in hard copy; there will also be a video sharing via Google Drive. | |
| **ACTION: Working on it** | |
| During this phase, the teacher may:  • ask probing questions;  • clarify misconceptions, as needed, by redirecting students through questioning;  • answer students’ questions (but avoid providing a solution to the problem);  • observe and assess;  • encourage students to represent their thinking concretely and/or pictorially;  • encourage students to clarify ideas and to pose questions to other students. | During this phase, students may:  • represent their thinking (using numbers, pictures, words, manipulatives, actions, etc.);  • participate actively in whole group, small group, or independent settings;  • explain their thinking to the teacher and their classmates;  • explore and develop strategies and concepts. |
| **Describe the task(s) in which your students will be engaged. What misconceptions or difficulties do you think they might experience?**  Students will have to choose the recipes to design a menu (**Difficulty**: Choosing the recipes, reach a consensus)  Using the HP Reveal App (**Difficulty**: Understanding how the application works)  Make the recipes (**Difficulty**: Get the desired result)  **How will they demonstrate their understanding of the concept?**  Students will demonstrate their comprehension by way of the flyer creation, the procedural video, and the mini presentation before the jury.  **How will you gather your assessment data (e.g., checklist, anecdotal records)?**   * Videos * Question period (in *Masterchef Canada* there is always a judge circulating, asking the contestants questions) * The flyer   **What extension activities will you provide?**  Students could devise their own molecular cuisine recipes. | |
| **CONSOLIDATION: Reflecting and Connecting** | |
| During this phase, the teacher may:  • bring students back together to share and analyse strategies;  • encourage students to explain a variety of learning strategies;  • ask students to defend their procedures and justify their answers;  • clarify misunderstandings;  • relate strategies and solutions to similar types of problems in order to help students generalize concepts;  • summarize the discussion and emphasize key points or concepts. | During this phase, students may:  • share their findings;  • use a variety of concrete, pictorial, and numerical representations to demonstrate their understandings;  • justify and explain their thinking;  • reflect on their learning. |
| **How will you select the individual students or groups of students who are to share their work with the class (i.e., to demonstrate a variety of strategies, to show different types of representations, to illustrate a key concept)?**  Classmates will share their work with the jury and judges.  **What key questions will you ask during the debriefing?**  What challenges did you face? | |