Performance Task Plan

Title	*Confused* Students and the Marshmallow
Grade	5th
Time Line	Two weeks
Designer(s)	Jeff Gentry

Project Sketch
(a short summary of the unit including expected/possible products)

Students will design multimedia projects to help a confused student understand the differences between physical and chemical changes. They will research the scientific concepts and explain what happens to a marshmallow when it is roasted. Students will then take on a role of a teacher to explain these concepts to "confused" students. Along with the presentation, students will design an assessment to check for understanding.

Instructional Focus

Compelling Question:	Speaking scientifically, can a marshmallow turn into something else if we roast it over a campfire?

	Focus	*Complementary*	*NETS-s*
Standards	S5P2. Students will explain the difference between a physical change and a chemical change. S5CS5. Students will communicate scientific ideas and activities clearly.	Investigate physical changes by separating mixtures and manipulating (cutting, tearing, folding) paper to demonstrate examples of physical change. Recognize that the changes in state of water (water vapor/steam, liquid, ice) are due to temperature differences and are examples of physical change. Investigate the properties of a substance before, during, and after a chemical reaction to find evidence of change. Write instructions that others can follow in carrying out a scientific procedure. Make sketches to aid in explaining scientific procedures or ideas.	1. Creativity and Innovation: students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology. 2. Communication and Collaboration: students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others. 3. Research and Information Fluency: students apply digital tools to gather, evaluate, and use information. 4. Critical Thinking, Problem Solving, and Decision Making: students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.

Assessment (Milestones)

Diagnostic	*Formative*	*Summative*
Students took a pre-test on Edmodo.com to check their level of understanding before the unit began.	Students will upload all documents and communications for collaboration to this wiki to serve as formative assessments of student work and progress toward the goal. Teacher will provide feedback before students will start working on their final presentations.	The final presentation will serve as the summative for this unit. This Rubric will be used to grade student work. Students will evaluate each other's work as well.

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		Teacher Role	Student Role	Milestones	Resources/Materials
	Instructional Plan				
Introduction		• Set up a pre-test in Edmodo. Evaluate student performance to differentiate further instruction. • Introduce the project outline and its learning objectives. Give out the rubric. • Introduce Wikispaces and the class wiki for the project. Model how to upload documents into wikis.	• Students take the pretest in Edmodo • Review the rubric. Take notes and write down questions to ask after the project is introduced. • Upload a mock document to the wiki. Begin the brainstorming process with their team to determine their work plan for the project.	Upload the brainstorming activity results to either Edmodo or Wikispaces.	Edmodo.com (app is available) Rubric *BYOT:* Note Taking apps Wiki for the project *BYOT*: iBrainstorm, Inspiration, Idea Sketch *School Tech*: Inspiration, MCWord, Kidspiration, Wixie, Pixie.
Instruction & Activities		The project will serve as the vehicle for instruction of this unit. The Webquest requires students to proceed in a structured manner. As students conduct their research, they will keep detailed notes for use in collaboration with their team mates. Activities are self-guided and embedded in the webquest. During the entire process, the teacher is available to help guide students and act as facilitator. The teacher will help with content or technology questions when needed.	• Use the Webquest as their guide for the project steps. • Gather information about matter and collaborate with team mates to develop an answer to the essential question. • Collaboratively work on a presentation that will be used to teach "confused" students about the scientific concepts. • Develop an assessment that "confused" students may take after the presentation.	Venn diagrams uploaded to the wiki Student proposal for project idea (conferencing) Student-created assessment uploaded to the wiki.	Changes of Matter Webquest (all documents, links, and handouts can be found in the webquest) *BYOT* (presentation apps): Story Kit, My Story, Show Me, Educreations, ExplainEveruthing, other voice and video recording apps *Shool Tech*:, Wixie, Pixie Power Point, Audacity (podcast)

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Closure & Reflection	• Provide time for self- and peer evaluations in the classroom. • Review and evaluate student projects using the rubric. • Give written feedback to each team. • Ask for feedback on ways to improve the project from a student perspective.	• Self and peer evaluate and offer constructive feedback based on the rubric requirements. • Write a reflection and include ways this project met or did not me their needs and learning styles.	Written evaluations, both self and peer. Written reflection on the project.	Rubric (students will submit hard copies of the rubric to the teacher. This offers the student the opportunity to offer constructive criticism of peers without risk of hurt feeling) Students can offer feedback to the teacher by clicking the **Click here to give feedback to the author** link at the bottom of the Conclusion Link of the Webquest.

Differentiation
(How will you differentiate content and process to accommodate various learning styles and abilities? How will you help students learn independently and with others? How will you provide extensions and opportunities for enrichment?)

Individualized support will be provided by the teacher by constant monitoring of student performance and offering various avenues to learn the material in ways that best meet their learning style. The students have filled out a learning styles survey in Edmodo. The teacher will review these styles and accommodate where possible by offering research opportunities outside the ones offered in the Webquest. For example, for a future project, students will be grouped according to learning preference and ask to produce a product that reflects that style.

Teacher Reflection/Notes
(As you were implementing this project in the classroom, what worked well? What needed to be changed, adjusted? What would you do differently next time?)

Reflecting upon the work completed thus far, I would group students in pairs rather than in threes. The reason being, only one student seems to have done most of the research for some of the groups while the other two did most of the creative work. This has led to the creative students losing focus on the overarching learning goal and understandings. I have redirected all teams to focus upon the standards and to express the understanding through this medium, not to focus on the medium as the learning objective.