**August 25th to August 29th**

Standards:

SL 5.6 Derivative of x n (n ∈ ℚ), sinx, cosx, e x and lnx. Differentiation of a sum and a multiple of these functions.

The chain rule for composite functions. Example: f(x) = e(x 2 + 2) , f(x) = sin(3x − 1)

The product and quotient rules. Link to: composite functions (SL2.5).

Learning Targets:

I am learning how to apply the chain rule when finding the derivative of a function.

I am learning how to apply the product rule when finding the derivative of a function.

I am learning how to apply the quotient rule when finding the derivative of a function.

Success Criteria:

I can apply the chain rule when finding the derivative of a function.

I can apply the product rule when finding the derivative of a function.

I can apply the quotient rule when finding the derivative of a function.

**Week at a Glance IB Analysis and Approaches Year 2**

Monday: Chain Rule

Tuesday: Product and Quotient Rule

Wednesday: NWEA MAP and Progress Learning Derivatives

Thursday: NWEA MAP and Progress Learning Derivatives

Friday: NWEA MAP and Progress Learning Derivatives

**IB Learner Profile: Communicators 🗣️**

The aim of this assignment is to help students develop as **communicators**. As an IB learner, a communicator understands and expresses ideas and information confidently and creatively in more than one language and in a variety of modes of communication. They work effectively and willingly in collaboration with others. This assignment focuses on understanding why language is a fundamental tool for effective communication and learning.

**Assignment: The Power of Creole in Haitian Education**

**Introduction:**

Read the article "Haitian educators and MIT faculty develop Kreyòl-based teaching tools" from [news.mit.edu](https://nam11.safelinks.protection.outlook.com/?url=http%3A%2F%2Fnews.mit.edu%2F&data=05%7C02%7Cfredede%40boe.richmond.k12.ga.us%7Ca227e058e3b740c3db5308dde29b104f%7C30b22d4073624f1783a92530927b6f65%7C0%7C0%7C638915877815145318%7CUnknown%7CTWFpbGZsb3d8eyJFbXB0eU1hcGkiOnRydWUsIlYiOiIwLjAuMDAwMCIsIlAiOiJXaW4zMiIsIkFOIjoiTWFpbCIsIldUIjoyfQ%3D%3D%7C0%7C%7C%7C&sdata=fvjYVpWYktkqPVqhdfCtvsxPSUCDHgiQ0DDmrx%2F9vEA%3D&reserved=0). This article discusses a pivotal shift in Haiti's education system, where educators and linguists are advocating for the use of Haitian Creole (Kreyòl) in the classroom instead of French.

**Task 1: Summary and Analysis**

1. **Summarize** the main problem identified in the article regarding the use of French in Haitian schools.
2. **Explain** the solution proposed by the MIT-Haiti Initiative and the core belief of linguist Michel DeGraff.
3. **Identify and explain** at least two specific benefits of using Kreyòl as the language of instruction, as mentioned in the article.

**Task 2: Reflection and Connection**

1. Based on your understanding of the article, explain **why** it is so important for students to learn in a language they are fluent in, such as their native language. Consider how this relates to learning complex topics like science, technology, engineering, and mathematics (STEM).
2. The article mentions that Creole languages can "convey complex intellectual concepts." Discuss why this is a significant point in challenging the historical view of these languages.
3. Reflect on your own learning experience. How does communicating in your most comfortable language affect your ability to understand new concepts and express your ideas? How might this be different if you were required to learn in a language you were not fluent in?

**Task 3: Creative Expression**

Imagine you are a part of the MIT-Haiti Initiative. Create a short presentation (1-2 minutes), a poster, or a one-page informational handout that persuades a group of Haitian parents and teachers to embrace Kreyòl-based education. Your presentation should be simple, clear, and highlight the benefits you identified in Task 1.

**Grading Criteria**

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| **Criteria** | **Exceeds Expectations (A)** | **Meets Expectations (B)** | **Developing (C)** |
| **Summary & Analysis** | Provides a comprehensive and insightful summary, and a detailed explanation of key points. | Accurately summarizes the article's main points and provides a clear explanation. | Basic summary and explanation, may be missing some key details. |
| **Reflection & Connection** | Demonstrates deep critical thinking, provides thoughtful insights, and connects concepts to personal experience. | Thoughtful reflection that connects key ideas from the article. | Superficial reflection with limited connection to the article's themes. |
| **Creative Expression** | The creative piece is highly persuasive, well-organized, and effectively communicates the benefits of Kreyòl education. | The creative piece is clear and effectively presents a case for Kreyòl education. | The creative piece is basic and lacks a strong persuasive message. |
| **Communicator Profile** | Student's work shows a strong understanding of the "Communicator" profile by articulating complex ideas clearly and persuasively. | Student's work demonstrates an understanding of the "Communicator" profile by clearly expressing ideas. | Student's work has some difficulty in clearly expressing or organizing ideas. |