A Comprehensive Roadmap to Success in the MYP Interdisciplinary Learning eAssessment

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Interdisciplinary Teaching and Learning in the MYP

What is Interdisciplinary Learning?

Interdisciplinary teaching and learning are fundamental pillars of the Middle Years Programme (MYP), where students learn to weave together knowledge and skills from multiple subjects to develop deeper understanding. This innovative approach breaks down traditional subject boundaries, allowing students to explore connections between different disciplines like Sciences, Arts, and Mathematics. Through interdisciplinary learning, students develop the critical thinking skills needed to tackle complex real-world challenges while gaining a more holistic understanding of how different fields of knowledge interact and complement each other.

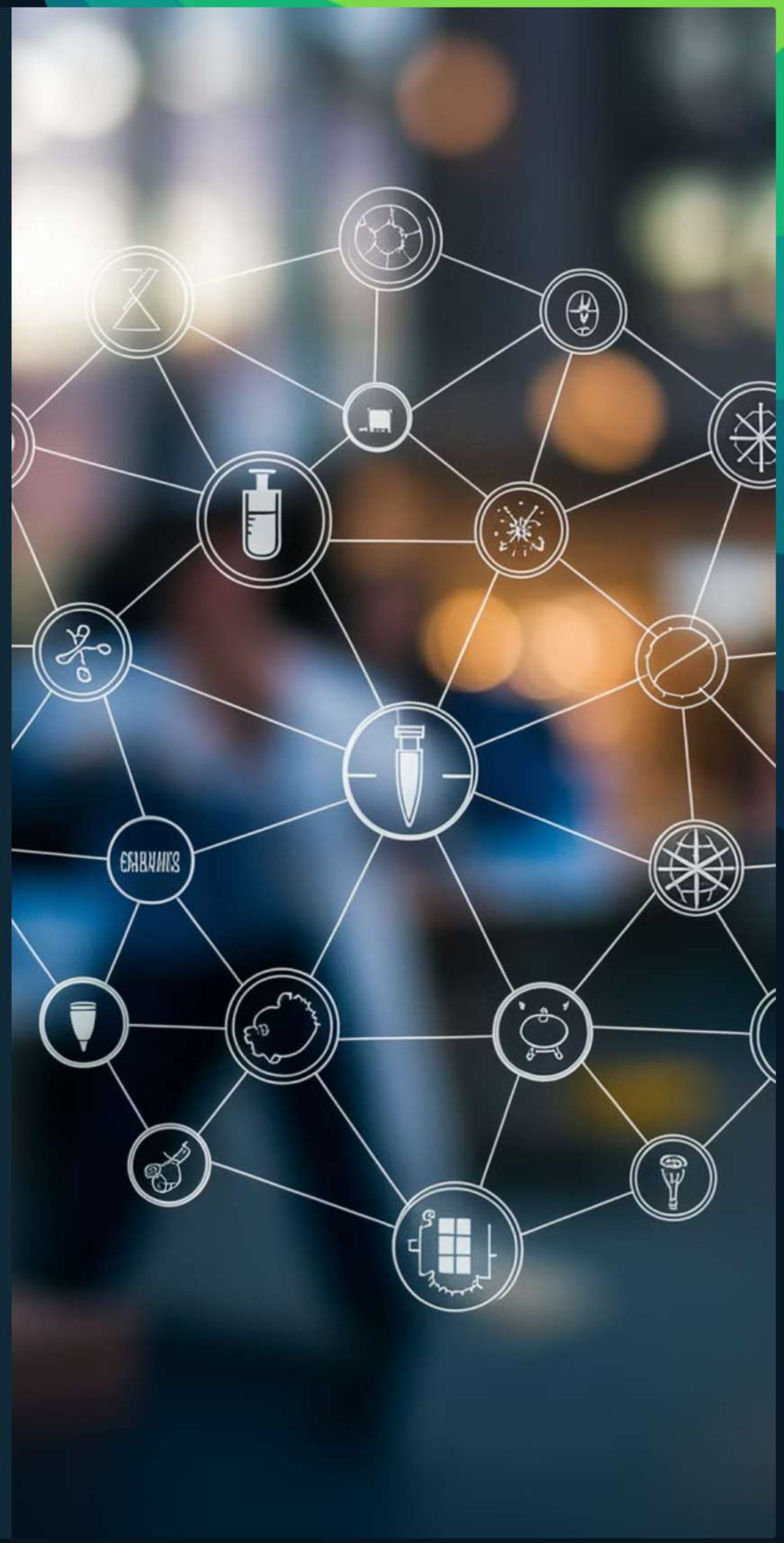


Key Benefits and Skills Development

Through strategic integration of multiple disciplines, students develop sophisticated problem-solving capabilities that transcend traditional subject boundaries. They learn to analyze complex challenges - from climate change to technological innovation - through multiple lenses simultaneously. This interdisciplinary approach cultivates essential 21st-century skills including systems thinking, adaptability, and innovative problem-solving, preparing students to tackle real-world challenges with confidence and creativity.

Implementation in the MYP

The MYP transforms interdisciplinary learning from theory into practice through carefully designed learning experiences that connect at least two distinct subject areas. Students might, for example, combine scientific analysis with artistic expression to explore environmental issues, or integrate mathematical modeling with historical research to understand societal patterns. This practical application helps students master crucial skills like evidence-based reasoning, cross-cultural communication, and metacognitive reflection - competencies that are increasingly valued in higher education and professional settings.



MYP Interdisciplinary eAssessment Overview

Two-hour on-screen examination

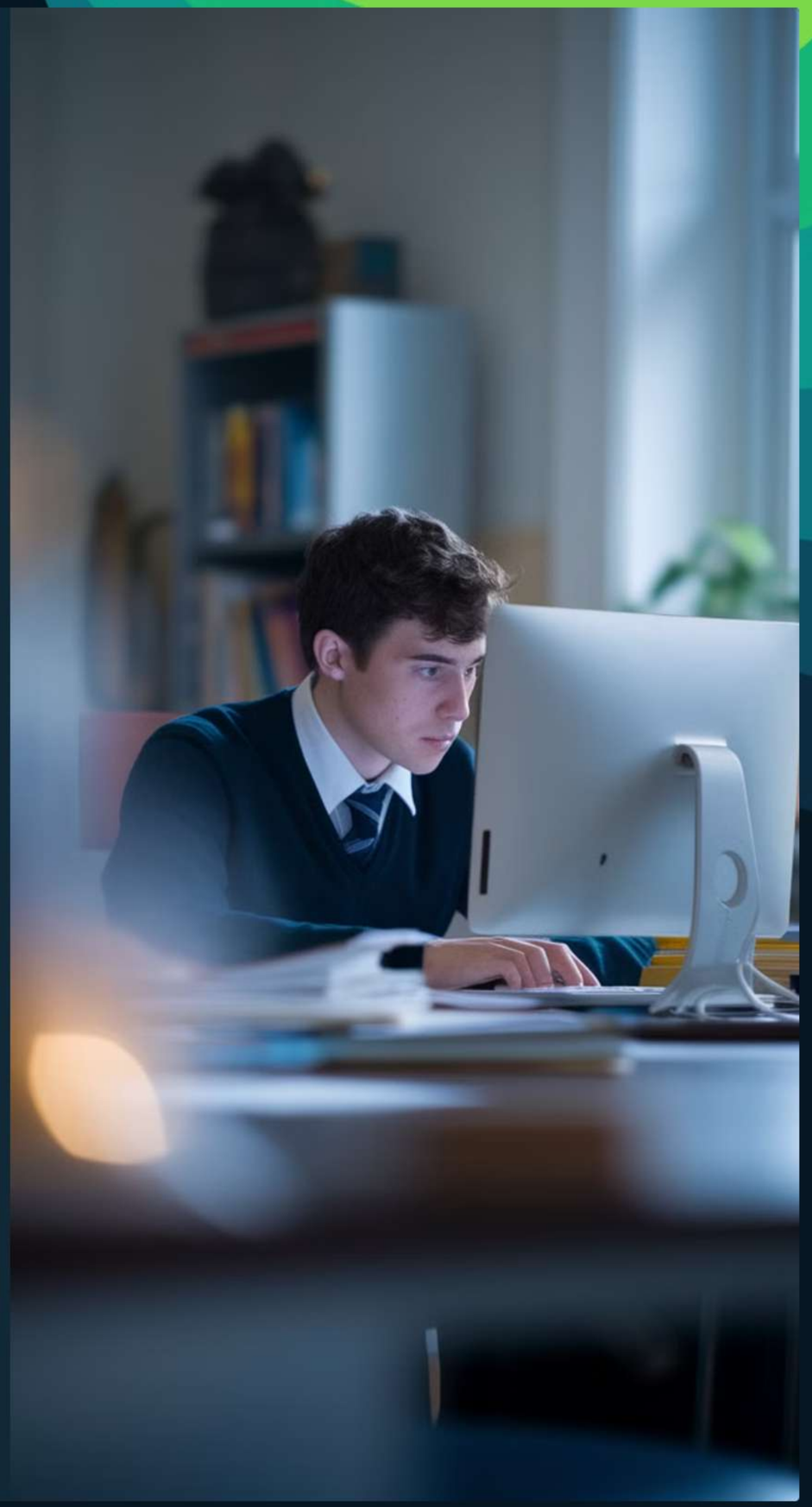
Focuses on analyzing and synthesizing knowledge from two subject groups: Language and Literature, Individuals and Societies, Sciences, Mathematics, while exploring global contexts.

Pre-release material

Includes multimedia stimuli, case studies, and contextual details connected to a global context, enabling students to analyze interdisciplinary connections and prepare thoughtful responses.

Two assessment tasks

Designed to assess Evaluating and Reflecting (Task 1) and Synthesizing and Reflecting (Task 2).





Task 1: Evaluating and Reflecting

1

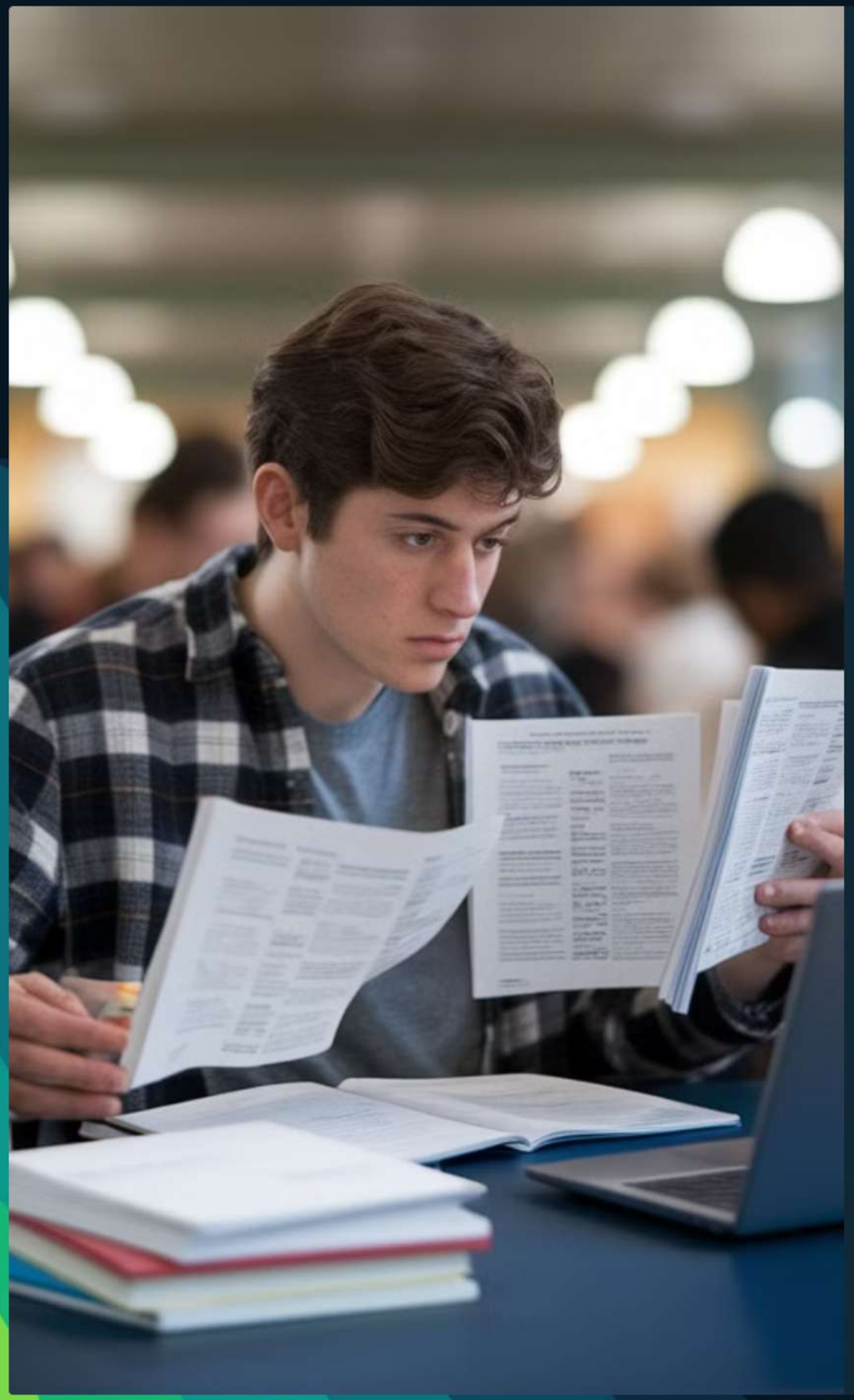
Analyze source material

Students critically examine source material through both disciplinary and interdisciplinary lenses, identifying key concepts, methodologies, and insights that contribute to understanding complex global challenges.

2

Evaluate approaches

Students systematically assess the effectiveness, limitations, and synergies between different disciplinary perspectives, demonstrating how integrated approaches lead to deeper understanding and more comprehensive solutions than single-subject methods alone.



Task 2: Synthesizing and Reflecting

1

Create original product

Students demonstrate creative synthesis by developing an innovative solution, model, or proposal that meaningfully integrates key concepts and methodologies from multiple disciplines to address a complex challenge.

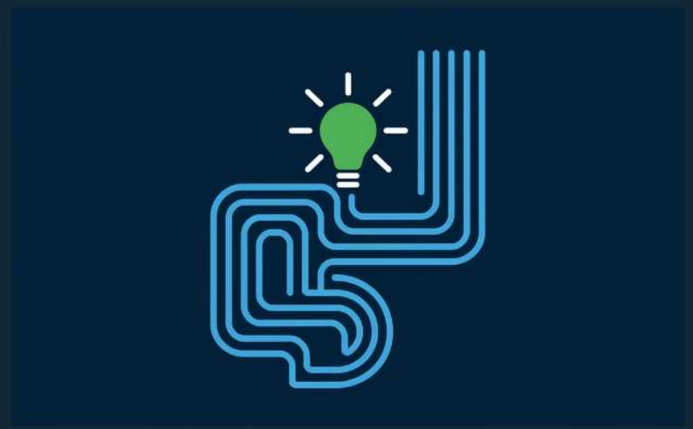
2

Justify and reflect

Students clearly articulate the rationale behind their interdisciplinary approach, evaluate the effectiveness of their synthesis, and identify specific opportunities for deepening their understanding through further cross-disciplinary exploration.

Structure and Marking Criteria







Criterion A: Evaluating (8 marks)

Analyze disciplinary knowledge and evaluate interdisciplinary perspectives within the source material.

Criterion B: Synthesizing (8 marks)

Create an interdisciplinary product and justify how it communicates purposeful understanding.

Criterion C: Reflecting (8 marks)

Discuss interdisciplinary learning journey and explain how new understanding enables action.

The blueprint emphasizes fairness and transparency, ensuring that the assessment aligns with the MYP's criterion-related philosophy and subject-specific grade descriptors.

Road Map for Excelling in Task 1: Evaluating

1

1. Understand the Source Material

Carefully read or analyze the source material. Identify the disciplines being used and their key concepts. Highlight connections to real-world and contextual issues.

2

2. Analyze Disciplinary Knowledge

Break down how each discipline contributes to understanding the issue. Explain concepts clearly and relate them to the context.

3

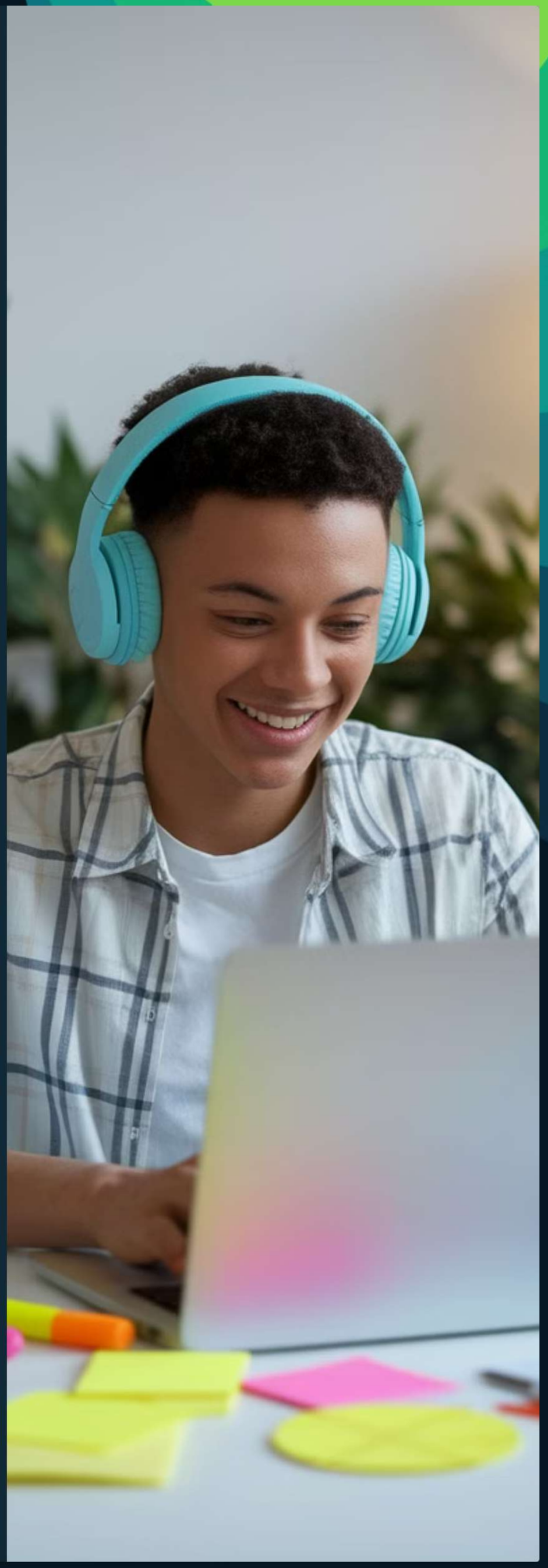
3. Evaluate Interdisciplinary Perspectives

Discuss the strengths and limitations of combining the disciplines. Explain how the integration of disciplines enhances understanding of the issue or, if applicable, where it falls short.

4

4. Structure Your Response

Introduction: Summarize the issue and disciplines involved. Main Analysis: Explain disciplinary knowledge and evaluate interdisciplinary perspectives. Conclusion: Provide an evaluative judgment, supported by evidence.



Road Map for Excelling in Task 2: Synthesizing and Reflecting

1

1. Understand the Problem

Identify the issue or challenge and determine which disciplines are most relevant.

2

2. Create a Product

Develop a creative, original solution or response that integrates knowledge from the selected disciplines. Ensure the product communicates a purposeful interdisciplinary understanding.

3

3. Justify Your Approach

Clearly explain how the knowledge from each discipline is synthesized to address the problem. Provide examples or reasoning to support your interdisciplinary approach.

4

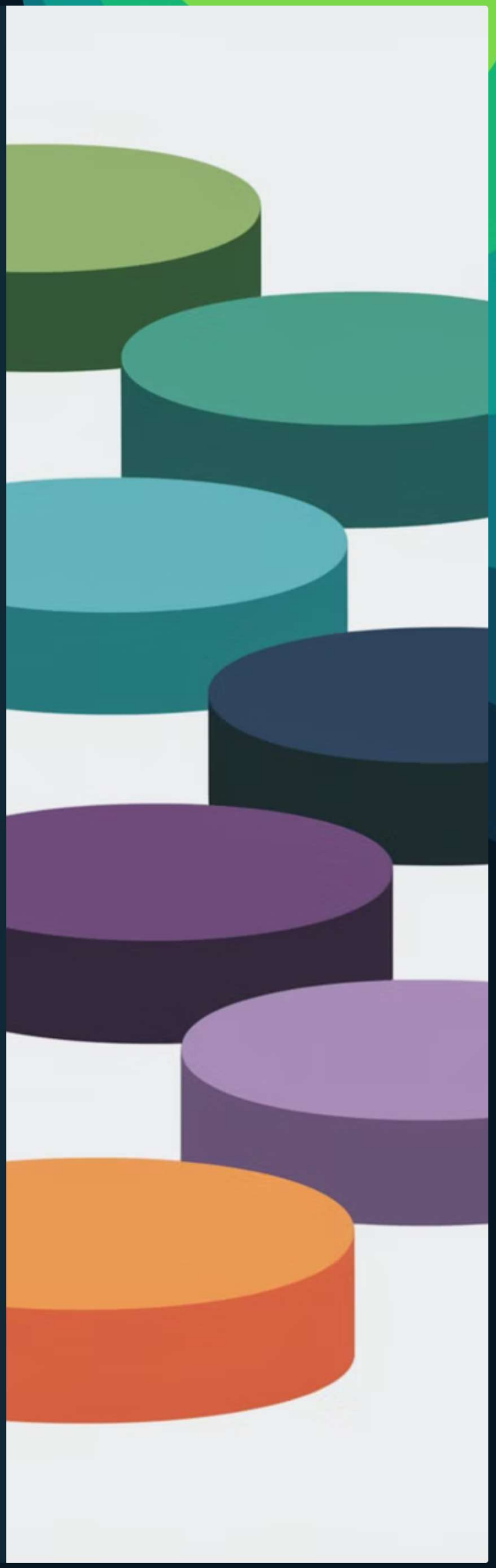
4. Reflect on Learning and Action

Discuss how the process of integrating disciplines deepened your understanding. Consider what future actions or applications could extend your learning.

5

5. Structure Your Response

Introduction: State the issue and selected disciplines. Main Body: Present your interdisciplinary product, explain how it communicates understanding, and justify your choices. Reflection: Discuss your learning and potential applications.



Specific Example: Task 1 Evaluating

Compare and contrast "The Solar Car" and "The Hydrogen Car" sales brochures

1

1. Introduction

Introduce both brochures, mentioning the integration of mathematics (e.g., data, efficiency) and science (e.g., energy principles).

2

2. Main Analysis

Describe how solar energy principles are paired with mathematical models in "The Solar Car". Analyze how hydrogen fuel technology is supported by numerical projections in "The Hydrogen Car".

3

3. Evaluate Strengths and Weaknesses

Discuss the effectiveness of interdisciplinary integration in each brochure, focusing on clarity, accuracy, and relevance. Highlight gaps or oversights in how the disciplines are synthesized.

4

4. Conclusion

State which brochure more effectively combines disciplines and why, based on specific evidence.



Specific Example: Task 2 Synthesizing and Reflecting

Prepare a proposal justifying which scenario is best by applying your knowledge of science and mathematics.

1

Step 1: Introduction

Begin by introducing the available scenarios and clearly state which one you have selected for analysis.

2

Step 2: Main Body Development

Build your justification using scientific principles (energy efficiency, sustainability) and mathematical evidence (cost projections, efficiency rates). Address potential counterarguments by employing logical reasoning to strengthen your position.

3

Step 3: Reflection and Future Applications

Explore how combining disciplines enhanced your problem-solving approach. Consider and suggest future applications or actions that could extend from your interdisciplinary solution.



Achieving the Highest Marks in Each Criterion



Criterion A: Evaluating (8 Marks)

- Fully Analyze: Explain disciplinary knowledge in detail and connect it to the real-world issue.
- Fully Evaluate: Explain the strengths and limitations of interdisciplinary perspectives clearly, using specific examples.
- Use Insightful Analysis: Go beyond surface-level observations by exploring nuances in the integration of disciplines.



Criterion B: Synthesizing (8 Marks)

- Synthesize Knowledge: Develop a product that combines disciplinary knowledge in a purposeful and integrated way.
- Justify Effectively: Provide clear reasoning and examples for how your product communicates interdisciplinary understanding.
- Communicate Creatively: Present your ideas in a structured, logical, and innovative manner.



Criterion C: Reflecting (8 Marks)

- Discuss Learning: Reflect deeply on how integrating disciplines developed your understanding.
- Enable Action: Explain how your new understanding could lead to action, either during the task or in future applications.
- Show Insight: Provide thoughtful and specific reflections that demonstrate a high level of awareness of the learning process.

How to Achieve a Grade 7 Overall

1 Comprehensive Understanding of Concepts and Contexts

Fully explain how the selected disciplines contribute to understanding real-world issues. Clearly connect disciplinary knowledge to interdisciplinary perspectives and justify its relevance.

2 Sophisticated Critical Thinking and Analysis

Provide nuanced and insightful evaluations of interdisciplinary perspectives. Identify and explain both strengths and limitations of the disciplinary integration with depth and clarity.

3 Effective Synthesis and Communication

Develop creative, purposeful interdisciplinary products that combine disciplines seamlessly. Clearly justify how the product addresses the issue using both disciplines.

4 Deep Reflection and Actionable Insights

Reflect thoughtfully on how the interdisciplinary process deepened your understanding. Discuss actionable outcomes, either through actions taken during the task or proposed for the future.



Key Tips for Both Tasks



1. Thoroughly Understand the Assessment Criteria

Focus on three key areas:

- Criterion A (Evaluating): Explain disciplinary knowledge and evaluate interdisciplinary perspectives
- Criterion B (Synthesizing): Create a product that integrates disciplines purposefully and justify it effectively
- Criterion C (Reflecting): Discuss your learning process and how it enables action



2. Plan Your Response Before Writing

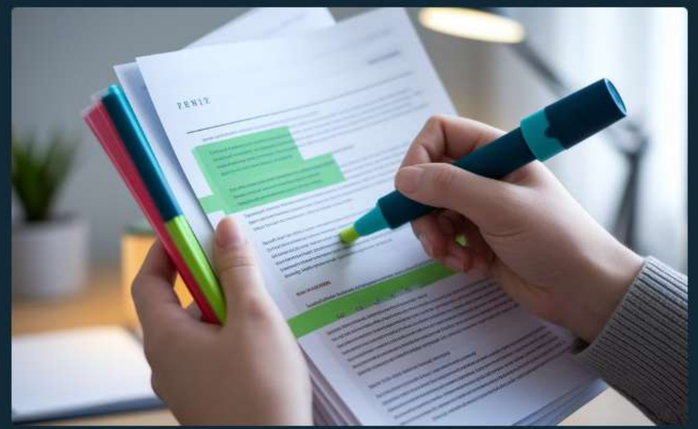
Spend 5–10 minutes planning your structure and key points. Make sure your response directly addresses the task requirements and criteria.



3. Integrate Disciplines Seamlessly

Highlight how the disciplines complement each other to provide a richer understanding. Avoid treating them as separate silos—show connections and interactions.

Key Tips for Both Tasks







4. Use Evidence to Support Your Claims

- Use specific examples from the source material for Task 1
- Incorporate scientific principles, mathematical calculations, or real-world examples in Task 2

5. Reflect Thoughtfully

- Go beyond stating what you learned—explain how the process influenced your thinking or understanding
- Discuss how this understanding could be applied to other real-world contexts

6. Communicate Clearly and Effectively

- Use structured paragraphs with clear topic sentences
- Employ appropriate subject-specific vocabulary for mathematics, science, and interdisciplinary learning

Key Tips for Both Tasks



7. Manage Your Time Wisely

- Allocate roughly 1 hour per task, including planning and reviewing your response
- Leave time to proofread and ensure clarity and completeness



8. Demonstrate Creativity and Originality

- In Task 2, propose innovative solutions or products that reflect deep thinking and purposeful synthesis

Key Features of a Grade 7 Response

1

Task 1: Evaluating

To achieve excellence in evaluation, demonstrate:

- Comprehensive Analysis: Fully explain the disciplinary knowledge and its role in the source material
- Nuanced Evaluation: Insightfully discuss how the interdisciplinary approach enhances understanding and identify gaps or limitations
- Strong Evidence: Support claims with clear examples from the source material

2

Task 2: Synthesizing and Reflecting

For outstanding synthesis and reflection, show:

- Purposeful Product: Synthesize knowledge to create a product that directly addresses the real-world issue
- Clear Justification: Justify the interdisciplinary approach with logical reasoning and specific evidence
- Insightful Reflection: Reflect on your learning process and its impact on your understanding and future actions

