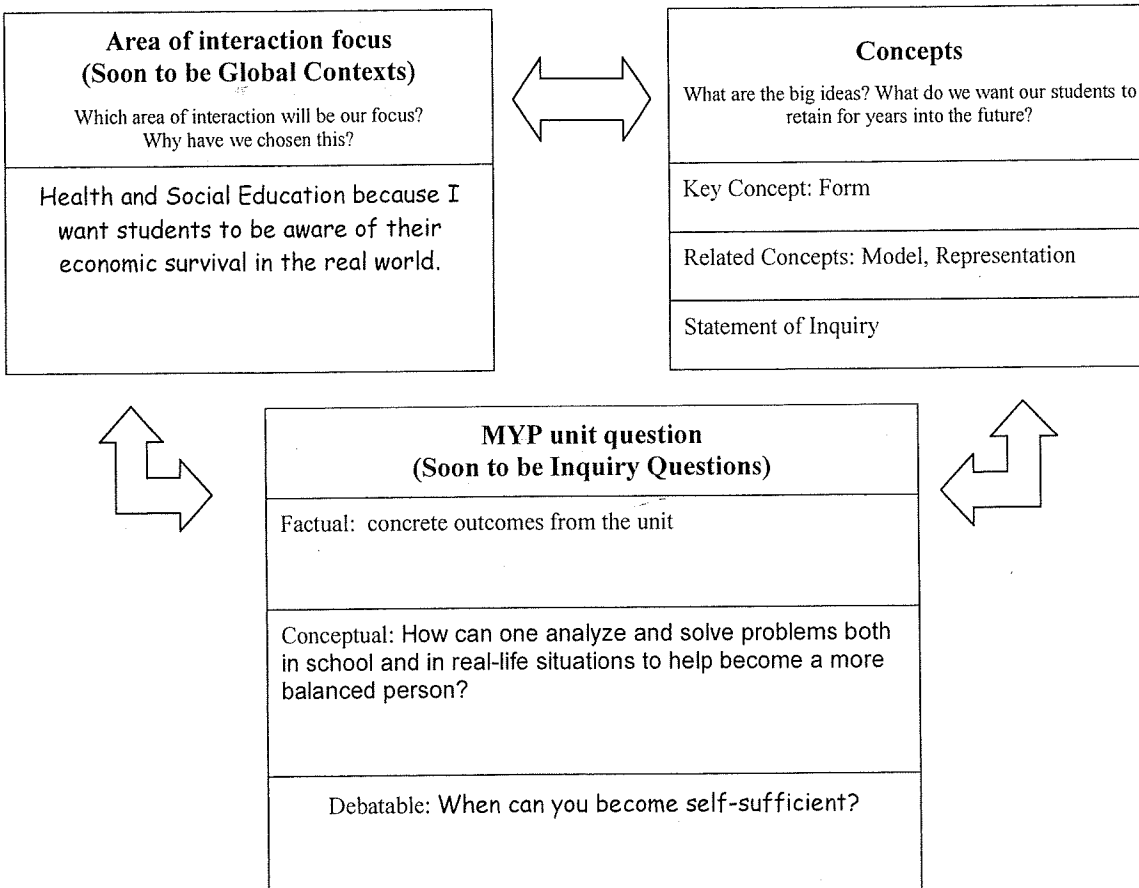


MYP unit planner

Unit Title	Show Me the Money, Ch 1-2
Teacher(s)	Ramsdell, C
Subject and Grade Level	Algebra 2
Time frame and Duration	6 weeks

Stage 1: Integrate significant concept, area of interaction and unit question



Assessment

What task(s) will allow students the opportunity to respond to the unit question?

What will constitute acceptable evidence of understanding? How will students show what they have understood?

Line of best fit car assessment—Students will collect the mileage and price of at least 10 cars of the same make, model, and year. Then students will collect the year and price of at least 10 cars of the same make and model with similar mileage. They will create two lines of best fit for the data and then determine whether based on their information hi-mileage or price has more of an effect on the price of a car. They will discuss possible reasons for their conclusions and reflect on what they would take more into consideration when buying a car.

Which specific MYP objectives will be addressed during this unit?

A

At the end of the course, students should be able to:

- know and demonstrate understanding of the concepts from the five branches of mathematics (number, algebra, geometry and trigonometry, statistics and probability, and discrete mathematics)
- use appropriate mathematical concepts and skills to solve problems in both familiar and unfamiliar situations, including those in real-life contexts
- select and apply general rules correctly to solve problems, including those in real-life contexts.

C

At the end of the course, students should be able to communicate mathematical ideas, reasoning and findings by being able to:

- use appropriate mathematical language (notation, symbols, terminology) in both oral and written explanations
- use different forms of mathematical representation (formulae, diagrams, tables, charts, graphs and models)
- communicate a complete and coherent mathematical line of reasoning using different forms of representation when investigating complex problems.

D

At the end of the course, students should be able to:

- explain whether their results make sense in the context of the problem
- explain the importance of their findings
- justify the degree of accuracy of their results where appropriate
- suggest improvements to the method when necessary.

Which MYP assessment criteria will be used?

Criteria A, C, D

Stage 2: Backward planning: from the assessment to the learning activities through inquiry

Content

What knowledge and/or skills (from my course overview) are going to be used to enable the student to respond to the guiding question?

What (if any) state, provincial, district, or local standards/skills are to be addressed?

Properties of Real Numbers, Algebraic Expressions, Solving Equations, Solving Inequalities, Absolute Value Equations/Inequalities, Relation and Functions, Linear Equations, Scatterplots and Linear Regression, Using Linear Models, Absolute Value Functions/Graphs, Vertical/Horizontal Translations, Two variable inequalities.

SOL A2.1, A2.10, A2.13, A2.4, A2.8, A2.9, A2.19

Approaches to Learning

How will this unit contribute to the overall development of subject-specific and general AtL skills?

Notes (guided notes are given with each section for students to work along with the teacher, then practice on their own, where they may ask another student or me for more personalized help with learning the material), explore learning (students will explore gizmos to develop knowledge on their own), working in groups (students will complete small group activities such as the hand span activity, where they practice communicating by writing a group paper), reflecting on learning

Learning Experiences

How will students know what is expected of them?
Will they see examples, rubrics, templates, etc.?

How will students acquire the knowledge and practise the skills required? How will they practise applying these?

Do the students have enough prior knowledge?

Teaching Strategies

How will we use formative assessment to give students feedback during the unit?

What different teaching methodologies will we employ?

How are we differentiating teaching and learning for all? Have we considered those learning in a language other than their mother tongue? Have we considered those with special educational needs?

Guided notes sheets with examples and guided practice.

Homework for practice.

In class group work to solve harder application problems dealing with: Interest money, International Money exchange rates, Credit Cards, Car Payments, House Payments, etc.

Credit Card Bills to introduce modeling

Linear Regression to introduce another way of generating a line

Note taking, group work and presentation of ideas, guided practice on white boards, and white grids, questioning ,

Resources

What resources are available to us?

How will our classroom environment, local environment and/or the community be used to facilitate students' experiences during the unit?

Computer, calculator, guided note sheets,

Ongoing reflections and evaluation

In keeping an ongoing record, consider the following questions. There are further stimulus questions in the unit planning section of *MYP: from principles into practice*.

Students and Teachers

What did we find compelling? Was our disciplinary knowledge/skills challenged in any way?

What inquiries arose during the learning? What, if any, extension activities arose?

How did we reflect - both on the unit and on our own learning?

Were there any attributes of the learner profile that were encouraged through this unit? Were there any opportunities for action?

Possible connections

How successful was the collaboration with other teachers within my subject group and from other subject groups?

What interdisciplinary understandings were or could be forged through collaboration with other subjects?

Assessment

Were students able to demonstrate their learning?

Did the assessment tasks allow students to demonstrate the learning objectives identified for this unit? Did I make sure students were invited to achieve at all levels of the criteria descriptors?

Are we prepared for the next stage?

Data collection

How did I decide on the data to collect? Was it useful?

Students developed their learner profile attribute of being balanced by learning about how credit cards work and can easily get out of control.

Final assessment for this unit allowed for connections to English. Students realized that what they learn about writing in English applies to writing in math class as well. We discussed writing introductions with a thesis, giving support for our theses, concluding our papers.

I have collected data on students' ability to master material by giving a Chapter 1 test and a chapter 2 quiz.