MYP unit planner

Unit title	**Does it really make cents?**
Teacher(s)	Mask
Subject and grade level	Math 7th Grade
Time frame and duration	10 days

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

Area of interaction focus Which area of interaction will be our focus?	**Significant concept(s)** What are the big ideas? What do we want our students to retain for years into the future?
Health and social education Percents are an important part of everyday life. My percentage of nutrition, body fat, and weight are all a part of health factors in life. Making purchases, figuring discounts, mark-ups, loans, investments, interest are part of society's economy.	Everything has value.

MYP unit question
What is the cost of my decision?

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?
Students will research a topic from the teacher list. Students will create a survey of individual statistics in topics dealing with weight, health, finances and the economy. The student will write a one page report of their research topic and create a circle graph showing percentages of their find .
Which specific MYP objectives will be addressed during this unit?
A-Knowledge and understanding C-Communication in mathematics
Which MYP assessment criteria will be used?
Students will use appropriate mathematical concepts and skills to solve problems in both familiar and unfamiliar situations, including those in real-life contexts. Students will select and apply general rules correctly to solve problems, including those in real-life contexts. Students will use different forms of mathematical representation (formulae, diagrams, tables, charts, graphs, and models). Students will communicate a complete and coherent mathematical line of reasoning using different forms of representation when investigating complex problems.

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

Content

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

What (if any) state, provincial, district, or local standards/skills are to be addressed? How can they be unpacked to develop the significant concept(s) for stage 1?

LA.7.1.6.5 Vocabulary, MA.7.A.1.2, MA.7.A.3.2, MA.7.A.5.1 Percent Diagram, Percent of a number, Percent and estimation, Find percents, Percent of change, Sales tax and tips, Discounts, Simple Interest, MA.7.A.1.1 Percent proportions, MA.7.A.3.3 Percent Equations, Problem solving

Approaches to learning

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

Analyzing and interpreting.

Using open-ended investigations.

Using real-life problems do design mathematical models.

Using networks and flow diagrams as tools for making decisions on purchases and expenses.

Learning experiences	Teaching strategies
How will students know what is expected of them? Will they see examples, rubrics, templates? How will students acquire the knowledge and practise the skills required? How will they practise applying these? Do the students have enough prior knowledge? How will we know?	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? How have we made provision for those learning in a language other than their mother tongue? How have we considered those with special educational needs?
Students will take a pre-assessment review of what they've already learned. Students will create a number map to show their understanding of percents. The number map will be scored on a rubric of mastery skills in Percents.	Students will work as a group to complete a KWL Chart to access prior knowledge. Students will use a web diagram to create a (picture is worth a thousand words) number map relating to percents. In collaborative pairs, the students will explore diagrams and graphs-make a bar diagram that represents 100% and another bar the same length to represent 500. Interpreting surveys into a percentage graph. Shopping to find discounts and totals Finding taxes, tips and totals for meals. Finding percents in real life. Defining the percent proportion and equation. Students will research calculating simple interest to make a purchase.

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?

Textbooks, internet, library, graph paper, calculators, research, guest speakers, news papers, graphs

Ongoing reflections and evaluation

In keeping an ongoing record, consider the following questions. There are further stimulus questions at the end of the "Planning for teaching and learning" section of *MYP: From principles into practice*.

Students and teachers

What did we find compelling? Were 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?

Which attributes of the learner profile were encouraged through this unit? What opportunities were there for student-initiated 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?

How did the assessment tasks allow students to demonstrate the learning objectives identified for this unit? How 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 we decide on the data to collect? Was it useful?

Figure 12

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