



Financial Literacy: Secondary Discovering the Workplace

Connections to Financial Literacy

Describe the financial literacy knowledge and skills which will be addressed and assessed in this lesson. Financial literacy knowledge and skills could include, but are not limited to:

- understanding needs and wants;
- consumer protection and consumer awareness;
- personal financial planning such as budgeting, saving and investing;
- social, ethical and environmental implications of financial decisions;
- active citizenship;
- understanding the economy;
- planning for the future.

Mathematics, Grade 10

**Subject/Course
Code/Title/Curriculum Policy**

Curriculum Expectations

Learning Goals

Discovering the Workplace, Grade 10, Open (GLD20)

Personal Management

Using Literacy and Numeracy Strategies

- identify the numeracy strategies required for calculation and estimation, and use them effectively to manage money (e.g., make change), to work with schedules and budgets ..., to analyse data (e.g., compare monthly reports), and to measure and make numerical calculations ... using real workplace materials in school, in the community, or in real or simulated workplace settings.

At the end of this lesson, students will:

- know how to use the “Rule of 72” formula to calculate doubling periods to awaken their understanding of investing/saving and spending.
- understand and articulate how compound interest can affect them positively and negatively.
- know how financial institutions use money to make money to become

an informed consumer.

Instructional Components and Context

Readiness

Link back.

- Students need to use mental math skills to see patterns and estimate.
- Students need to use calculators to do simple multiplication.
- If students are working in Excel on computers, students should have basic experience with Excel using addition, division and multiplication formulas.

Terminology

- It would be helpful if students know simple Excel terms such as cell, row, column, formula, etc.
- Students should know financial terms: investment, savings, interest, etc.

Materials

List all materials required by the teacher and the student for the lesson.

Must:

- “Rule of 72” handouts (look for attachment)
- Simple calculators
- Pencils
- Teacher answer key (look for attachment)
- Television that can connect to a computer to show *YouTube* video clips

Could:

- LCD projector for teacher to show video, show answer key and/or to guide students in using Excel.
- *computers would be a benefit as students could then do “what if” calculations in Excel to examine different values.

Minds On	Connections
<p>“Rule of 72- Just for Fun” Activity – can be completed as a whole, in small groups or individually. Give instructions to the whole class; guide students when you see them struggling. NOTE: Do not allow students to work ahead!</p> <p>Introduction:</p> <ul style="list-style-type: none"> ▪ Show students Part 1 (3 mins 43 secs) of “Quest for Credit Mountain” video: http://www.youtube.com/watch?v=WPHOQw5Zpig ▪ this humorous 8 minute video introduces a “hero” who naively and unexpectedly walks into a credit/debt trap (Part II is shown after the activity) ▪ As a whole class, discuss the pitfalls that faced the “hero” in Part 1 of the film clip (i.e., not listening to the advice of the “old man”, purchasing “wants” without much thought, being naïve about the contract and the minimum payments, etc.); this should prime students to discover the power of compound interest. 	<p>Explicitly label:</p> <ul style="list-style-type: none">  Assessment for learning  Assessment as learning  Assessment of learning  Explicitly identify planned differentiation of content, process, or product based on readiness, interest, or learning

Action!

- ♦ Introducing new learning or extending/reinforcing prior learning
- ♦ Providing opportunities for practice and application of learning (guided > independent)

Whole Class, small groups and individual activities.

Begin “Rule of 72” Activity:

- Hand out “Rule of 72” sheets.
- Begin “First” activity: read through the paragraph together, explaining carefully what students are to do (some students are not comfortable with performing mathematical calculations). Only give students about 3-4 minutes to complete chart; hopefully, they will quickly see a pattern developing. Remind students to complete the questions below.
- Discuss the first activity as a class, ensuring students grasp the understanding of the “Rule of 72” calculation and an understanding of the gap between what financial institutions offer as investment/savings interest and charge as mortgage/loans interest.
- Next, move on to “Second” activity: Again, read through the paragraph as a class pausing at the “question” and the “think” sections so students can make some estimations/guesses about the value of the investment at the end of the term before actually carrying out the calculations. Have students complete the chart (should only take a few minutes, but watch for struggling students).
- Discuss the findings and read the “Do Note” section. The goal is to open students’ minds to the facts of investing and how smaller amounts can add up over time to become significant amounts depending on the interest. It is compounding interest over time that creates the exponential growth.
- Begin the “Third” activity: Read through the paragraph as a class, pausing at the “think” section before students begin the calculations. Allow students to work through the calculations, but it is important at this point that **students do not share their “findings” with others**. This activity is the “clincher”, where you want students to see the exponential explosion because of the high interest rate.
- Discuss the findings, allowing students lots of opportunity to ask questions and share their discoveries.

Consolidation

- ◆ Providing opportunities for consolidation and reflection
- ◆ Helping students demonstrate what they have learned

Whole Class**Description:**

- Watch the second part of the “Quest for Credit Mountain” video at http://www.youtube.com/watch?v=C1xA6vFfRHw&feature=watch_response and allow time for discussion and questions.
- At this point, you could have students create a financial plan that would show their understanding of the “Rule of 72” as it may apply to their futures.