

## FiCycle Lessons Combining Math and Personal Finance



### A FiCycle Analysis of GameStop

During January 2021, there was a spectacular run up in the price of the stock of GameStop (Ticker symbol: GME). The price rose from \$18.84 per share at the end of December to \$325.00 per share at the end of January. Most of the discussion about GameStop has been about the relative power of individual investors and Wall Street hedge funds. While this is an important debate, at FiCycle, we want to dip deeper into determining the value of the stock to a long-term investor and “Do the Math.”

**To download the lesson materials, please [CLICK HERE!](#)**



### Wealth Not Cash

‘Wealth not cash’ is a detailed plan for a lesson that introduces students to the concept of wealth. In accordance with our vision for finance education, we believe that understanding wealth should be the foundation of any personal finance course. These materials give teachers the tools to start this foundational work with their students.

A fundamental concept in finance, students are taught to understand their financial well-being in terms of wealth, rather than simply cash. Throughout the lesson, a series of activities and applications are used to entrench this new way of thinking about finance. In addition, the lesson uses the accounting equations to get a precise mathematical model of these concepts, and students must critically apply them in varying contexts to deepen their understanding.

**To download the lesson materials, please [CLICK HERE!](#)**



### Compound Interest and Your Financial Life Cycle

This lesson introduces students to compound interest and situates it within the framework of the financial life cycle. This allows students to understand why we borrow money for certain financial goals, such as college education, and invest it for others, such as retirement. Students can apply exponents in rich modelling activities, rather simply plugging in numbers into the compounding formula.

The materials include a detailed lesson plan and slides, a complete set of worksheet and answer keys, along with a project-based final assessment which combines mathematical skill with financial reasoning. This provides a fresh approach to teaching both compound interest and exponents, one that allows students to critically analyze decisions regarding borrowing and investment and find an authentic application of mathematics.

**To download the lesson materials, please [CLICK HERE!](#)**





## Logarithms and FiCycle LOGs

FiCycle LOGs are a manipulative designed to help with instruction on exponents and logarithms. By using a 'constructivist' approach to teaching logarithms, FiCycle LOGs allow students to explore and discover the properties of logarithms in the physical world before explicitly linking them to exponents. Each piece is labeled with a number and the length of the piece is proportional to the logarithm of the number. Thus, FiCycle LOGs exhibit all of the properties of logarithms.

The available materials include cutout paper LOGs, a teacher's guide, 13 worksheets to teach various properties of logarithms, change of base formula, solving equations using logarithms, and more.

To download the lesson materials, please [CLICK HERE!](#)



## Equality Relations and Net Worth

FiCycle has worked with the Council for Economic Education to create lessons geared for students from 6th-8th grade, which can be found on their website in two parts.

In this math lesson, students will use net income & net worth equations to learn about wealth and equality.

To access the lesson materials for part one, please [CLICK HERE!](#)

To access the lesson materials for part two, please [CLICK HERE!](#)

Alternatively, please use this QR code to access our Lessons webpage, which has all of the lessons available:



Contact us: [info@ficyle.org](mailto:info@ficyle.org)

