**Academic Enrichment Curriculum**

**Math Enrichment**

Week 1

Day 1: Good Cop/Bad Cop Act 1 ([mathalicious.com](http://www.mathalicious.com/lessons/good-cop-bad-cop))

 Interpreting histograms and calculating percents

Day 2: Good Cop/Bad Cop Act 2 ([mathalicious.com](http://www.mathalicious.com/lessons/good-cop-bad-cop))

 Interpreting histograms and calculating percents

Week 2

Day 1: Get rich quick (<http://www.learner.org/interactives/dailymath/playing.html>)

 Calculating probabilities

Day 2: Get rich slow (<http://www.learner.org/interactives/dailymath/savings.html>)

 Compounding interest

Week 3

Day 1: Nutrition math - how many calories burned? ([mathalicious.com](http://www.mathalicious.com/lessons/newtritional-info))

 Using units and calculating calories burned per minute

Day 2: Nutrition math - how long to burn off calories? ([mathalicious.com](http://www.mathalicious.com/lessons/newtritional-info))

 Using units and calculating minutes required to burn off calories

Week 4

Day 1: Three Shots - probability of winning game with free throws ([mathalicious.com](http://www.mathalicious.com/lessons/three-shots))

 Calculating probabilities

Day 2: Three shots - should a team foul at the buzzer? ([mathalicious.com](http://www.mathalicious.com/lessons/three-shots))

 Using probabilities to make choices

Week 5

Day 1: Domino Effect - graphing pizza costs ([mathalicious.com](http://www.mathalicious.com/lessons/domino-effect))

 Slope-intercept form, graphing

Day 2: Domino Effect - analyzing different sizes and pricing strategies ([mathalicious.com](http://www.mathalicious.com/lessons/domino-effect))

 Slope-intercept form, graphing, interpreting graphs

Week 6

Day 1: X-box Exponential - Moore’s law of computer speed ([mathalicious.com](http://www.mathalicious.com/lessons/xbox-xponential))

 Constructing an exponential equation from Moore’s law

Day 2: X-box Exponential - Comparing expected with actual speed ([mathalicious.com](http://www.mathalicious.com/lessons/xbox-xponential))

 Deriving an equation from actual results

**Writing Enrichment**

Week 1

Day 1: Creative writing: Your own business

http://writingprompts.tumblr.com/post/30585147140/from-the-archives-writing-prompt-324-what

Day 2: Write a letter to your future self.

 Reflect on goals and practice letter-writing

Week 2

Day 1: Creative writing: Where he disappeared

http://writingprompts.tumblr.com/post/31990278144/600-hole-in-a-dark-forest

Day 2: Write a letter to your past self.

 Reflect on experiences and practice letter-writing

Week 3

Day 2: Basics of resumes

 Practice reading resumes from perspective of employer

Week 4

Day 1: Creative Writing: Spartan, Viking, Knight, Roman

http://writingprompts.tumblr.com/post/31861129209/from-the-archives-but-updated-writing-prompt

Day 2: Building resumes

 Start building the resume you would like to have in the future

Week 5

Day 1: Creative Writing: I bet you have something to say about this

http://writingprompts.tumblr.com/post/28557399311/559-friends-should-be-nice

Day 2: Letters of recommendation

 Read letters of recommendation and correct errors

Week 6

Day 1: Creative Writing: Facebook breakups

http://writingprompts.tumblr.com/post/27050770481/from-the-archives-writing-prompt-196

Day 2: Writing a letter of recommendation

Write an ideal letter of recommendation for yourself

**Other Enrichment and Rec Curriculum**

**Introduction to Media Arts**

**Program Objective:** To provide an awareness of the technology used to create apps while developing skills in math, science and language arts as part of STEM. This initiative enhances the student’s ability to understand the technical aspects concerning the electronic art-media industry and reveals a sense of efficacy in achieving the skills/talents necessary to realize future aspirations in the technology industry.

**Curriculum Design:** The curriculum is designed to include class sessions of thirty minutes a day, four times a week. The first session will be an introductory discussion of the topic. The second session will include hands-on activities, exercises, and group discussions. Remaining sessions will include hands-on practice and quizzes.

**Student Equipment and Supplies:**  Access to computers with capability of installing Blender,flash drives to save project assets needed to complete the program, notebook, and pen/pencil

**Using M.I.T. App inventor**

([appinventor.mit.edu](http://appinventor.mit.edu/)).

**Lesson 1:** Learning the interface and intro tutorials.

1. Introduction and vocabulary given relevant to day's lesson

2. Set up accounts and watch intro videos

**Lesson 2:** Building first app (http://appinventor.mit.edu/explore/ai2/beginner-videos.html)

1. Overview of learning objectives and process

2. Watch tutorial video and answer questions

3. Work time and instructor support

**Lesson 3:** Building first app

1. Overview of learning objectives and process

2. Work time and instructor support

**Lesson 4:** Customizing and presenting first app

1. Work time and prep for short presentation

2. Present your app to classmates and highlight distinctive feature

**Lesson 5:** Economics of app-building

1. Video about successful apps and their creators

2. Discussion of options for building, selling, and marketings apps

**Lesson 6:** Building second app (http://appinventor.mit.edu/explore/ai2/beginner-videos.html)

1. Overview of learning objectives and process

2. Watch tutorial video and answer questions

3. Work time and instructor support

**Using Blender (free 3D modeling and video editing software)**

**Goal:** Ensure that every student gains competency in using the video editing tools in Blender Software ([www.blender.org](http://www.blender.org)).

**Lesson 1:** What is Blender (http://www.blender.org/features/reels/)

**Lesson 2:** Getting into Blender and exploring features

**Lesson 3:** Basics of video shooting

**Lesson 4:** Basics of video editing

**Lesson 5:** Brainstorm student project ideas

**Lesson 6:** Shoot and edit student projects

**Lesson 7:** Edit student projects

**Lesson 8:** Edit students projects and prepare to present

**Lesson 9:** Student project presentations

**Lesson 10:** Careers in video production and editing

**Lesson 11:** Creating first 3D structure

**Lesson 12:** Creating second 3D structure

**Lesson 13:** Careers in 3D animation

**Lesson 14:** Game design basics

**Lesson 15:** World building

**College/Career Prep Class**

**Lesson 1: Introduction and Dream Job Workshop**

Objective: Students will identify their ideal ideal jobs, their skills and strengths, and how to monetize those skills/strengths.

Activities:

**Lesson 2: Making a College/Career Map**

Objective: Students will create a plan to achieve their career and life goals by working backwards and determining what they need to accomplish between then and now.

Activities:

**Lesson 3: Funding Your Dreams**

Objective: Students will demonstrated an understanding of how student loans and other sources of investment capital can be obtained and how their payment structures work.

Activities:

**Lesson 4: Proving You’re a Good Investment**

Objective: Students will create a list of reasons and arguments about why they are a good investment for society, and will demonstrate an understanding of how and why funding is available to them.

Activities:

**Lesson 5: They’ll Test You**

Objective: Students will differentiate between various tests, their purposes, and their costs/benefits for entry into colleges and careers.

Activities:

**Lesson 6: Testing Strategies 101**

Objective: Students will use time management, answer selection strategies, study strategies, and sleep and nutrition strategies to improve their test scores.

Activities:

**Lesson 7: Entrepreneurship Basics 1: Make a Plan**

Objective: Students will present a basic business plan that incorporates financial, marketing, and operational strategic considerations.

Activities:

**Lesson 8: Entrepreneurship Basics 2: Pitch a Plan**

Objective: Students will present their business plan and use techniques of effective presentations.

Activities:

**Lesson 9: Self-advocacy and Professionalism**

Objective: Students will write a guide to their fellow students about how to advocate for themselves and present themselves in a professional setting.

Activities:

**Lesson 10: Personal Finance 1: Income Management**

Objectives: Students will prepare a realistic budget for an income of $28,000 per year

Activities:

**Lesson 11: Personal Finance 2: Managing Credit and Debt**

Objectives: Students will choose a credit card offer from among alternatives and explain why by referencing fee structure, interest rate, and rewards.

Activities: