**TJMS Differentiation Report Q2 2023-2024**

| **Content** | *Example Science 6* |
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| **Unit(s)** | *Example Energy* |
| **Pre-assessment** | *Example 10 question multiple choice; brain-dump; KWL* |

| **Content** | [**Product**](https://docs.google.com/document/d/1cGLxxqi06N6j-ej8XeBIpNtf0EzO-kmZmxx4e1G_lns/copy) | [**Process**](https://docs.google.com/document/d/1cGLxxqi06N6j-ej8XeBIpNtf0EzO-kmZmxx4e1G_lns/copy) |
| --- | --- | --- |
| **Example:** A student knows forms of energy, so they study nuclear fusion while gen ed students study potential and kinetic energy. **Example:** 80% of the class demonstrates mastery of simile and metaphor, we skip the basics and teach higher level blooms mini-lesson and scaffold down for students who need support. **Other examples** - Advanced resources, student choice in novels/topics, [increased depth and complexity](https://drive.google.com/file/d/1UJX2bfVbkKwlEYnw76pZJJzgSGen4zgX/view?usp=sharing), [Jacob’s Ladder](https://drive.google.com/drive/u/1/search?q=jacobs%20ladder), William and Mary units, project-based learning science units, [independent projects](https://docs.google.com/document/d/18TPca1GnEcxCNeCAkUGymbjDPyPrhGiyiDgGHGQGlAA/edit), [science journal for kids](https://www.sciencejournalforkids.org/) | **Example:** Instead of completing a slide deck, students write a DBQ based on similar content of the slide deck. **Example:** On a math assessment, advanced students skip the level 1-2 questions and instead are given additional 5-6/7-8 questions. **Other examples** - [tiered assignments](https://drive.google.com/file/d/16FB9liHFhHxoOJCDf_VACStxK_LnbPFR/view?usp=sharing), student choice, [DBQ](https://www.dbqonline.com/instructor/) (document-based question), [PNI](https://docs.google.com/document/d/1o4mLqfBFAjuCFiF-zcpneOJpx8VJPqBWbLnfXfFtnvg/copy) (positive, negative interesting), [SCAMPER](https://docs.google.com/document/d/17mwId31gHQs4GtUMXRPLM_mOreDYNUMH2jRVqrjn6Q0/copy), [rich math tasks](https://docs.google.com/spreadsheets/d/1adCaKzi7nJZztGwcguAViTOMbP7-UDaH9Zt4eOibA0E/edit#gid=0) (to be used instead of gen-ed assignments), [algebra by example](https://access.serpinstitute.org/algebra-by-example/), emphasis on written communication to real world audience, evidence of original research, CER (claim, evidence, reasoning), what would happen if…, [reading comprehension choice board](https://docs.google.com/document/d/1_HCu4o3d-YH9xtWvGNqqA_WpvJdm5WRvBxBdEskSVoo/copy) | **Example:** Instead of watching a video and answering questions, students watch the video, complete a QFT routine, and choose 2-3 of their own questions to discuss in small group.\* **Example:** Students read an article about a current event and use the thinking routine *3 Whys* to discuss the ideas in the article. **Other examples** - Teaching most difficult first, Math workshop, fewer tasks assigned to demonstrate mastery, [thinking routines](http://www.pz.harvard.edu/thinking-routines), question formulation technique (QFT), socratic seminar, Kagan, [vocabulary webs](https://drive.google.com/drive/u/1/search?q=choice%20board), Frayer vocabulary model, [deBono’s hats](https://docs.google.com/document/d/1YcoNMXwjE1uC6h7ddyZ1vjzI9tztgqW3/copy), mind-mapping, [FFOE](https://docs.google.com/document/d/1a08hlW3aiWh8UwK1-f1xFE8_p5rWIBEn7Crki8HtS4s/copy) |

## 6th Grade Reading

| **Content** | Reading 6 |
| --- | --- |
| **Unit(s)** | Nonfiction reading |
| **Pre-assessment** | Nonfiction Part 1- performance on formative tasks and test |

| **Content** | **Product** | **Process** |
| --- | --- | --- |
| Nonfiction article - text sets * Students choose text set based on interest and ability

Independent reading * Students choose nonfiction book to read based on interest and level
 | Four square* Students synthesized information from text sets in 4 Square

One Pager* Summary
* Review of book
* Original text feature and illustration
* Some choice in what to include
 | Note-taking* Students tried multiple note-taking forms and eventually chose the style that was most effective for them

Organizational Patterns* Students identified organizational patterns (cause and effect, chronological, compare and contrast, etc.) and used the patterns to make inferences and draw conclusions.
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## 6th Grade ELA

| **Content** | ELA 6 |
| --- | --- |
| **Unit(s)** | Literary analysis and persuasive writing |
| **Pre-assessment** | On-demand writing prompt - Tortoise and Hare character analysis |

| **Content** | **Product** | **Process** |
| --- | --- | --- |
| Content is new - students have not seen this content in application to literatureThe assignment has rigorous expectations and scaffolded down for those students who need support. | Choose their own text to analyze. Advanced students are encouraged to choose more difficult texts or texts that are appealing to their interests. A student must choose a more complex text in order to analyze at an advanced level. Higher order thinking - counterclaim and explain the universal message that this character communicates to the reader.  | Students were grouped according to text choice. Students who meet the rubrics requirements are given polishing resources to enhance the final product. Students received feedback from Paper and revised based on recommendations.  |

## 6th Grade Science

| **Content** | Science 6 |
| --- | --- |
| **Unit(s)** | Astronomy, Chemistry |
| **Pre-assessment** | Astronomy and Chemistry unit pre-tests |

| **Content** | **Product** | **Process** |
| --- | --- | --- |
| **Planetary transit method data task** - Students use six data sets to draw conclusions about exoplanets using the transit method.**Gizmos** - Students complete a more complex Gizmo (virtual lab exploration) in lieu of the standard Gizmo. Intensified Gizmos include:* Seasons around the world
* Electrons and chemical reactions
* Ionic bonds
 | **Science article assignment** - Gen Ed students received structured, closed-ended prompts to construct their writing piece. Intensified students chose higher-level sources for their articles and completed the task with less teacher guidance. | **Tide data graphing** - Task has structure/supports removed to allow students to think through development of their own graph given a challenging data set.**Thinking routine warm-ups -** Students practice Harvard Project Zero thinking routines as warm-ups individually, in small groups, and as a whole class. Thinking routines include:* Word-phrase-sentence
* See-think-wonder
* Generate-sort-elaborate-connect
* +1

**Grouping** - Students grouped with same-ability peers when working together on creative thinking tasks |

## 6th Grade History

| **Content** | US History |
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| **Unit(s)** | Unit 2 American Revolution through the Civil War |
| **Pre-assessment** | Different methods depending on the lesson. |

| **Content** | **Product** | **Process** |
| --- | --- | --- |
| **American Revolution DBQ** - All students did document analysis. **Indian Removal DBQ** - All students did document analysis.  | **American Revolution DBQ** - rating scale, choice to do 1-3 body paragraphs, advanced students completed full essay**Indian Removal DBQ** - summative was a comic strip**Mind Maps** - Westward expansion for cause and effect**Civil War Choice Board** - Leveled sources and multiple topics and products | **Harvard Project Zero Thinking Routines*** Word, phrase, sentence
* See, think, wonder

**Positive, Negative, Interesting (PNI)****Advanced extensions built into each lesson with a 3-2-1 structure** |

## 6th Grade Math

| **Content** | Math 6 |
| --- | --- |
| **Unit(s)** | Fractions, Decimal, & Percents and Coordinate Plane |
| **Pre-assessment** | Coordinate Plane and Fractions, Decimals, & Percents |

| **Content** | **Product** | **Process** |
| --- | --- | --- |
|  |  | Students experienced math workshop structures that involved small-group teaching.  |

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## 7th Grade Intensified ELA

| **Content** | ELA 7 |
| --- | --- |
| **Unit(s)** | Truth & Beauty Perzine |
| **Pre-assessment** | Middle School Survival Zine (mastery shown here prior to being given approval for perzine) |

| **Content** | **Product** | **Process** |
| --- | --- | --- |
| A choice board of TED talks allowed students to choice the video that would best develop their ideas for showing truth & beauty in their own perzine.  | Individualized personal writing piece. Students chose 3-6 options for their writing pieces. Each student was required to incorporate 2 text features for each 1-2 pages spread. Each spread required text, image, color, and text features. Students in intensified classes were required to create 1 additional spread than the regular classes. | Project zero thinking routines are for advanced learners; truth & beauty thinking routine was the strategy used to deepen thinking. |

| Additional Notes:  |
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## 7th Grade Intensified Science

| **Content** | Life Science  |
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| **Unit(s)** |  |
| **Pre-assessment** |  |

| **Content** | **Product** | **Process** |
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## 7th Grade Intensified Civics

| **Content** | *Virginia Law RAFT* |
| --- | --- |
| **Unit(s)** | *Elections* |
| **Pre-assessment** | *Kahoot on Public Policy* |

| **Content** | **Product** | **Process** |
| --- | --- | --- |
| Elections - constituents using their voice to make a difference and impact public policy. | VA LAW RAFT | Students selected a proposed bill that the General Assembly will consider during the 2024 session. Students had the choice of Bills as well as how to demonstrate their understanding of the bill and why it is important. Students created podcasts, Brainpop movies, news broadcasts, or storybooks, Criterion B, C, & D were used to assess the products. |

## 8th Grade intensified ELA

| **Content** | Document-based writing, literature, and respectful dialogue |
| --- | --- |
| **Unit(s)** | Unit 1 Places That Shape Us / Unit 2 Power, Conflict, Change |
| **Pre-assessment** | DBQ: Jigsaw on Background Vocabulary; Unit 2: WWII Background Information Webquest and notetaker |

| **Content** | **Product** | **Process** |
| --- | --- | --- |
| Writing an argumentative essay with counter argumentPerformed a dramatic reading of the play “From the Diary of Anne Frank”Engaged in a Socratic Seminar about Power, Conflict, and Change in regard to the Holocaust and Anne Frank  | DBQ essaySocratic Seminar Double Entry Note PacketSocratic Seminar | For Unit 1, students read and analyzed DBQ documents and found evidence within the documents to support their thesis using the bucket method.* All students used graphic organizers to organize their final essays
* All students had access to sentence stems to aid in writing topic sentences and transitions.
* Intensified: included a counter argument in their essays.

Unit 2: Read Diary of Young Girl, Diary of Anne Frank play, and collected evidence about unit topics in double entry journal. * Gen Ed: Printed out double entry templates and offered sentence stems to aid in writing meaningful connections to unit topics
* Intensified: Students created double entry templates themselves and only used sentence stems as needed

Unit 2: Compile notes into resource packet in preparation for Socratic Seminar* Gen Ed: Students were given questions in advance and asked to apply text evidence to each question with an explanation
* Intensified: Students wrote unique tier 1, 2, and 3 questions and compiled notes according to unit topics of power, conflict, change
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## Geography

| **Content** | World Geography |
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| **Unit(s)** | Canada and the United States & Latin America |
| **Pre-assessment** | Unit Scavenger Hunts and Unit Cover Pages |

| **Content** | **Product** | **Process** |
| --- | --- | --- |
| Writing a DBQ responding to the prompt “*How does migration change people and places*”Latin America Research Project | DBQ Essay (LAVC)Research packet and website (extends into quarter three) | LAVC:* Students analyzed exemplar texts
* Access to sentence stems and graphic organizers
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## 8th Grade Intensified Science

| **Content** | Intensified Physical Science |
| --- | --- |
| **Unit(s)** | Unit 2, Independent Project |
| **Pre-assessment** | Chemical and Physical Changes Pre-assessment |

| **Content** | **Product** | **Process** |
| --- | --- | --- |
| Writing scientific arguments supported by evidence for most effective design in terms of mass distribution, density, and buoyancy for an aluminum foil boat.Writing scientific arguments supported by evidence for Physical vs Chemical Color ChangePerformed the Penny Boat Design Challenge, Solubility Lab, and How Low Can You Go? Freezing Point Depression Lab | Penny Boat Design Challenge and Chemical and Physical Changes Summative LabHow Low Can You Go? Summative LabUnit 3 Test (County) | For Unit 2, students analyzed structural designs of aluminum foil boats to maximize mass distribution and draw conclusions about buoyancy and density of solids vs the density of liquids. Additionally, students justified structural designs of their boats using evidence and application of divergent knowledge to a familiar situation (objects that are buoyant).* All students had a Penny Boat Design Challenge packet for their sketches, data collection, graph, and analysis questions.
* All students had access to sentence starters / frames to aid in their technical (scientific) writing
* All students had access to data to systems in order to compare data for argument for the most effective Penny Boat Design (system).

For Unit 2, students analyzed Freezing Point Depression through the use of Rock Salt (pure Sodium Chloride) to analyze the freezing point and possible ways to decrease the freezing point of water. Additionally, students were asked where this occurs in everyday life / real world application (making of ice cream and sidewalks and roads for snow and ice removal).* All students had access to laboratory investigation instructions and a How Low Can You Go? Summative Lab paper for data collection and analysis questions
* All students had access to laboratory equipment and testing supplies.

For Unit 2, students analyzed 5 Erlenmeyer flasks for solubility of 5 different solutions (water + sugar, water + sand, water + baking soda, water + baking powder, and water + flour)* All students had access to laboratory investigation instructions and reading materials to define solubility and criteria for physical observations for solubility.
* All students had access to the Solubility Lab student capture sheet to record their data and draw conclusions.
* All students had access to data to formulate rules of Physical Solubility in their own words. The data was collected on their student capture sheet and seen in the 5 solutions (5 Erlenmeyer flasks).
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## Pre-Algebra 6 & Pre-Algebra 7/8

| **Content** |  |
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| **Unit(s)** |  |
| **Pre-assessment** |  |

| **Content** | **Product** | **Process** |
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| Additional Notes:  |
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## Algebra Intensified

| **Content** | Writing Linear Equations, Systems of Equations |
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| **Unit(s)** | 4,5 |
| **Pre-assessment** | Writing Linear Equations Pre-Assessment in MC |

| **Content** | **Product** | **Process** |
| --- | --- | --- |
| Algebra Intensified students learned slope-intercept back to standard form, as well as emphasis on parallel and perpendicular lines, in addition to all standards addressed in regular algebra.  | The end of unit assessment included higher level questions for intensified students, including going backwards, making predictions, and writing equations given intercepts instead. Systems of Equations also included higher level questions on the Criterion A. On the Criterion C, students had to demonstrate their ability to solve systems using all three methods, and were then asked to compare, contrast, and give an opinion on when to use each method.  | During the writing linear equations unit, students collected data about themselves and their classmates in order to create and analyze lines of best fit, and apply math in a real world context. During the Systems of Equations unit, Intensified students discovered systems of equations through the “How many coins?” activity before explicitly learning methods for solving.  |

| Additional Notes:  |
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## Geometry

| **Content** | *Parallel Lines, Triangle Congruence,*  |
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| **Unit(s)** | *4, 5* |
| **Pre-assessment** |  |

| **Content** | **Product** | **Process** |
| --- | --- | --- |
| Geometry students learned the angle relationships in parallel lines with a transversal, as well as how to prove that lines were (or were not) parallel. Students also learned what it means for triangles to be congruent, and the theorems and postulates that prove triangles congruent. | Students took a criterion A test (in each topic) to show their mastery of the material. The test ranged in difficulty from level 1-2 to level 7-8. Students also had to show proficiency in writing a proof through a criterion C. Each unit had a proof as part of the exam. Additionally, students had a criterion B where they derived the relationships between different angles.Students also used their knowledge of congruent triangles to show that SSA was insufficient information to show triangles similar in a Criterion D project. | In the parallel lines unit students worked to derive theorems from previous knowledge in order to use proofs to extend their ability to use geometry.In the triangle congruence unit students used their knowledge of congruent triangles to draw triangles from the least amount of information possible. |

| Additional Notes:  |
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