Eugene School District 4J Math Placement Guidelines *Essential Questions:* How do we decide how students are placed in mathematics?

February 6, 2014

The following guidelines and resources offer a starting place for our district to consistently answer the essential question above. The intent today is <u>not</u> to dictate how schools place students in math class. The intent today, is to elicit feedback and suggestions so that as our district moves to consistently answering the essential question, we do so with equity in the forefront and with the best ideas and knowledge of our collective expertise.

Please submit your feedback to me either via email or *(preferably)* in person at a Math Placement Guidelines feedback session on:

Tuesday, February 24th in the Mozart room at the Ed Center from 8:30am - 10:00am.

The following sources were referenced in the creation of these guidelines

- Placement policies from Salem, Portland, Bethel and Springfield school districts
- Historical Eugene School District 4J guidelines
- Current practice at various Eugene School District 4J schools
- RTI resources
- Eugene School District 4J TAG policy
- Eugene School District 4J Math Teacher Leader feedback

It is also important to note that in the creation of these guidelines, the exposure of gaps in our ability to collect quality K-8 benchmark and progress monitoring data has been revealed. Current testing is limited in its mathematics diagnostic abilities and alternatives are being researched.

Submitted respectfully for your consideration,

Maddy Ahearn Math Administrator Eugene School District 4J

[if printing - please note the paper size varies between sections]

Eugene School District 4J Math Placement Guidelines **Essential Questions**: How do we decide how students are placed in mathematics?

| | Elementary School | Middle School | High School |
|-----------------|--|---|---|
| Supporting Core | Tier 2 & Tier 3 See guidelines | Grade level math support classes See guidelines | Grade level math support classes See guidelines |
| Core | Grade level math placement by default Tier 1: Core curriculum (Investigations) | Grade level math placement by default College Preparatory Math | 3 Tri Algebra → 2 Tri Geometry → 2 Tri Algebra 2 → beyond |
| Beyond Core | Grade level standard extensions See guidelines | Compacted CPM curriculum 6A → 7A → Algebra <u>See guidelines</u> | Algebra1 in 2 Trimesters See guidelines |
| | | Moving from grade level 6 → 7A → Algebra <u>See guidelines</u> | Acceleration via dual enrolling in math See guidelines |
| Beyond Core | Acceleration to next grade-levels Investigation curriculum in 4 th or 5 th grade See guidelines | Skipping 6A and going 7A → Algebra → Geometry See guidelines | Geometry or Algebra 2 as a 9 th grader <u>See guidelines</u> |

Elementary – Supporting Core

| Elementary – Supporting Core | | | | |
|------------------------------|--|--|--|--|
| Course | Tier 2: Remediation on | Tier 3: Targeted intervention on identified | | |
| | grade level standards | gap(s) (may be below grade level) | | |
| | | | | |
| Recommended | Tier 2 supports are | Tier 3 intervention recommended in | | |
| Structure | embedded into 70 daily | addition to 70 daily minutes of grade level | | |
| | minutes of grade level | math instruction. | | |
| | math instruction. | | | |
| | | Students receiving tier 3 supports are | | |
| | Students receiving tier | based on students' needs (not necessarily | | |
| | 2 supports are a fluid | grade level standards). | | |
| | group a determined by | grade level standards). | | |
| | - | Collaboration time is scheduled for the | | |
| | the grade level teacher. | interventionist and grade level teacher to | | |
| | | 9 | | |
| | | plan. Tier 3 should not happen in isolation | | |
| | | of Tier 1 & 2. Content needs to be cohesive | | |
| | | between the tiers and differentiation in | | |
| | | Tier 1 & 2 to support students making | | |
| | | connections. | | |
| Data to | | | | |
| determine | Student readiness and | Student readiness and need as determined | | |
| which students | need as determined by | by these possible sources of data: | | |
| receive support | these possible sources | Formative assessment data | | |
| | of data: | Other classroom data | | |
| | Formative | Data collected by interventionist | | |
| | assessment data | Benchmark & progress monitoring | | |
| | Other classroom | data | | |
| | data | | | |
| | Benchmark & | | | |
| | progress | | | |
| | monitoring data | | | |
| | montoring data | | | |
| Responsibilitie | Grade level teacher | Grade level teacher, Special Education | | |
| S | responsible for | teacher, title teacher or designated staff | | |
| 3 | determining and | | | |
| | | member responsible for delivering tier 3 intervention. | | |
| | providing Tier 2 | intervention. | | |
| Cil | supports. | - D (1 M (1 | | |
| Curriculum | • Investigations | • Do the Math | | |
| | Investigations | Supplemental resources as guided | | |
| | resource pages | by the <u>supplemental resource rubric</u> | | |
| | Supplemental | | | |
| | resources as guided | | | |
| | by the <u>supplemental</u> | | | |
| | <u>resource rubric</u> | | | |
| Pedagogy | As much as is developme | entally appropriate, it is recommended that | | |
| | high leverage instruction | nal strategies be implemented when | | |
| | supporting the core. These strategies should build <u>procedural</u> | | | |
| | understanding from conceptual understanding. | | | |
| | Such strategies include: | | | |
| | Strategy based fact practice | | | |
| | | ent discourse & reasoning (ie number talks) | | |
| | Representing mathematics multiple ways | | | |
| | Professional development on these and other strategies available by contacting | | | |
| | the Instruction Department | and the state of t | | |
| | | | | |

Elementary – Extensions

| Course | Tier 2: Extensions of grade level standards | | |
|--------------------------|---|--|--|
| Recommended Structure | Student receives core grade level instruction and extensions that address grade level standards at a greater depth of knowledge and/or higher cognitive demand. | | |
| Criteria | Student readiness and need as determined by these possible sources of data: • Formative assessment data • Other classroom data • Local performance assessments (work sample) • Benchmark & progress monitoring data* • State Summative Assessments (grades 3-5 only) *Note: EasyCBM data is extremely limited in its ability to determine if students are ready for extensions | | |
| Responsible | Grade level teacher (and TAG plan coordinator as appropriate) is responsible for determining when to provide extensions and to whom. If available, collaboration during grade-level team and/or data team to support grade level teacher in decision-making process. | | |
| Curriculum | Extensions that address grade level standards Extensions that modify Investigation activities to get to a greater depth of knowledge and higher cognitive demand. A limited number of extensions that are outside of Investigations are available on the Teacher Resource website Investigations units guides on the Teacher Resource website reference other examples NOT more of the same content | | |
| Pedagogy | As much as is developmentally appropriate, it is recommended that high leverage instructional strategies be implemented when extending from the core instruction. These strategies should encourage students in their <u>productive struggle</u> with high cognitive demand tasks. Such strategies include: • Promoting a growth mindset • Error analysis • Posing purposeful questions • Making connections between multiple math concepts • Representing math in multiple ways Professional development on these and other strategies available by contacting | | |
| | the Instruction Department | | |

Elementary - Single Subject Acceleration

The appendix of the Oregon's math standards states "Students who are capable of moving more quickly deserve thoughtful attention, both to ensure that they are challenged and that they are mastering the full range of mathematical content and skills-without omitting critical concepts and topics. Care must be taken to ensure that **students master and fully understand all important topics in the mathematics curriculum, and that the continuity of the mathematics learning progression is not disrupted.**" The following guidelines disrupt the progression of mathematics learning by allowing students to skip instruction on sets of standards. **Great care must be taken in making the following decision.**

| Course | Access to curriculum on a higher grade level's standards | | |
|--------------|--|--|--|
| Recommended | Either cluster grouping with above grade level peers (differentiation occurring | | |
| Structure | within the grade-level classroom) OR student is placed in a classroom that matche | | |
| Structure | | | |
| | the student's math level placement. | | |
| Process | 1. Grade level teacher (typically 4th or 5th) identifies students to be evaluated | | |
| | for advanced placement | | |
| | 2. Grade level teacher completes the 4j single subject acceleration form (if | | |
| | needed, contact TAG coordinator for assistance) | | |
| | o If evidence does not indicate (mainly 1's & 2's) advanced placement, | | |
| | see Elementary – Extension guidelines | | |
| | If results on the form indicate (mainly 3's & 4's) math acceleration is | | |
| | appropriate, grade level teacher collects multiple pieces of evidence | | |
| | | | |
| | (see below) | | |
| | 3. Data team or other appropriate school-based team evaluate the evidence | | |
| | If evidence does not indicate advanced placement, see <u>Elementary -</u> | | |
| | Extension guidelines | | |
| | If evidence supports single-subject advancement, the school contacts | | |
| | district math specialist and TAG coordinator to help the school make | | |
| | appropriate accommodations to meet the student's needs and parent | | |
| | letter is sent. | | |
| | If the student's family made the request for acceleration, steps 2&3 are completed | | |
| | with consistent communication to the family. | | |
| P '1 | A body of evidence should be considered when looking at a student for advanced placement in | | |
| Evidence | math. Multiple pieces of evidence should be considered and see below for evidence that could be | | |
| | considered. | | |
| | State Assessment Data | | |
| | o consistently exceeding benchmarks | | |
| | Formative assessment data or other classroom data | | |
| | o consistently assessed at a high level | | |
| | Local performance assessment (work sample) | | |
| | o scores of 5 or 6 on all rubric criteria | | |
| | Benchmark or other progress monitoring | | |
| | o Note that EasyCBM data is <u>extremely limited</u> in its ability to determine if students are | | |
| | ready for acceleration, but it could be one low weighted measure | | |
| | | | |
| Implications | A student skipping content causes gaps in their learning progression that may not surface | | |
| | until later in their mathematical careers potentially causing an inability to access higher math concepts. | | |
| Curriculum | Investigations at the appropriate grade level | | |
| Curriculum | If accelerating a grade level in 5th grade students, elementary schools must work with | | |
| | district math specialists, TAG coordinators and middle schools to meet students needs. | | |
| | Options include traveling to the middle school for math, accessing online curriculum or | | |
| | other as appropriate. | | |
| Pedagogy | As much as is developmentally appropriate, it is recommended that high leverage instructional | | |
| 0 00 | strategies be implemented when extending from the core instruction. These strategies should | | |
| | encourage students in their <u>productive struggle</u> with high cognitive demand tasks. Such strategies | | |
| | include: | | |
| | Promoting a growth mindset | | |
| | Error analysis | | |
| | Posing purposeful questions | | |
| | Making connections between multiple math concepts | | |
| | and the state of t | | |
| | Representing math in multiple ways Professional development on those and other strategies quallable by contacting the Instruction. | | |
| | Representing math in multiple ways Professional development on these and other strategies available by contacting the Instruction Department | | |

After careful consideration it has been decided that your child would benefit from accelerating a grade in math class. While we are willing to offer this opportunity to your child, we also want to make sure parents and students have considered the pros and cons of accelerated learning before making a final commitment. Below is a list of potential pros and cons to think about:

| Pros | Cons |
|---|--|
| | Students will be skipping content standards causing gaps in their learning progressions. These gaps may not surface until later grades. |
| are. | 2. Students who are not successful at any point in the accelerated sequence may need to be moved into on-grade level courses, causing a repeat of some material. |
| of taking high school courses for college credit. | 3. Students can feel like they are being challenged mathematically for the first time and have difficulty dealing with more rigorous expectations. |
| | 4. Students may have difficulty balancing more rigorous expectations with their social and emotional needs. |

Once you have discussed the pros and cons with your child and have made a decision whether or not to accept the opportunity, please let us know your intentions.

If you have any questions, please contact me. Thank you!

Sincerely,

Middle – Supporting Core

| Course | Math Support Class | | |
|---|---|--|--|
| Recommended | Students are scheduled into their grade level math class AND a math support | | |
| Structure | class. Math support and grade level teacher reevaluates students each trimester | | |
| | to determine if math support is still needed. | | |
| | | | |
| | A highly qualified math teacher or special educator teach the math support class. | | |
| | The teachers of the math support class and grade level math class are scheduled | | |
| | so that they can collaboratively plan at least weekly. | | |
| | Mathamana alamana maintain a 1.15 tao ahan ta ata dantan ti | | |
| | Math support classes maintain a 1:15 teacher to student ratio. | | |
| Responsibilities | 1. By April 15th, Middle school provides see 5th to 6th Transition form to | | |
| Responsibilities | feeder Elementary Schools. | | |
| | 2. By May 15 th 5 th grade teacher recommendations and student work on the | | |
| | local performance assessment are scanned and sent to middle schools and | | |
| | cced to district math administrator. | | |
| | 3. 5th grade teacher recommendation is used to schedule students into math | | |
| | support. | | |
| | 4. Each subsequent trimester, the middle school math team determines | | |
| | student placement in math support and communicates decisions with | | |
| | middle school scheduler | | |
| Data to | A math support class should be offered to students who need additional support | | |
| determine which | in order to access grade-level standards. Students are scheduled into a math | | |
| students take the | support class based on the following data sources: | | |
| course | Teacher recommendation | | |
| | Formative assessment data | | |
| | Other classroom data | | |
| | Local performance assessments (work sample) | | |
| | Benchmark & progress monitoring data | | |
| | State Summative Assessments | | |
| Implications | Students may miss elective classes depending on the school's schedule. | | |
| 0 1 | | | |
| Curriculum | Use the math support scope & sequence provided on the Teacher Provided on the Teacher Provided on the Teacher | | |
| | Resource Page to determine content | | |
| | During collaborative planning with grade level math teacher, identify During collaborative planning with grade level math teacher, identify During collaborative planning with grade level math teacher, identify During collaborative planning with grade level math teacher, identify During collaborative planning with grade level math teacher, identify During collaborative planning with grade level math teacher, identify During collaborative planning with grade level math teacher, identify During collaborative planning with grade level math teacher, identify During collaborative planning with grade level math teacher, identify During collaborative planning with grade level math teacher, identify During collaborative planning with grade level math teacher, identify During collaborative planning with grade level math teacher, identify During collaborative planning with grade level math teacher, identify During collaborative planning with grade level math teacher, identified the planting with grade level math teacher with the planting with grade level math teacher, identified the planting with grade level math teacher with the planting wi | | |
| | problems in the CPM text or CPM parent guide aligned to the content | | |
| Dodagogy | Supplemental resources as guided by the <u>supplemental resource rubric</u> As much as is developmentally appropriate it is recommended that high leverage | | |
| Pedagogy As much as is developmentally appropriate, it is recommended that instructional strategies be implemented when supporting the core. | | | |
| | | | |
| | strategies should build <u>procedural understanding from conceptual</u> <u>understanding</u> . | | |
| | Such strategies include: | | |
| | Strategy based fact practice | | |
| | Emphasis on student discourse & reasoning (ie number talks) | | |
| | Representing mathematics multiple ways | | |
| | Connecting mathematical representations (words, equations, tables, | | |
| | graphs, pictures, etc.) | | |
| | Professional development on these and other strategies available by contacting the | | |
| | Instruction Department | | |

 $\label{eq:middle-Acceleration} Middle-Acceleration from ~5^{th}~grade~into~6A$ The appendix of the Oregon's math standards states "students who are capable of moving more quickly deserve thoughtful attention, both to ensure that they are challenged and that they are mastering the full range of mathematical content and skills-without omitting critical concepts and topics. Care must be taken to ensure that **students master and fully understand all important** topics in the mathematics curriculum, and that the continuity of the mathematics learning progression is not disrupted."

| Course | Grade 6 Accelerated | | |
|-------------------|---|--|--|
| Recommended | Grade 6 students attend a 6A math class as their normally scheduled math class. | | |
| Structure | Students appropriately scheduled into in this class should be able to access the | | |
| Structure | rate and level without additional support. | | |
| | Tate and level without additional support. | | |
| | Math 6 and Math 6A are scheduled to allow for student swapping as may be | | |
| | needed in step 5 below. | | |
| Responsibilities | 1. By April 15 th , Middle school provides see 5 th to 6 th Transition form to | | |
| Responsibilities | feeder Elementary Schools. | | |
| | 2. By May 15 th 5 th grade teacher recommendations and student work on the | | |
| | local performance assessment are scanned and sent to middle schools | | |
| | and cced to the district math administrator. | | |
| | 3. By June 15 th , middle schools math teams have made initial decisions on | | |
| | placement and <u>mail letter to families</u> for whom acceleration is | | |
| | recommended. Sample letter on the next page. | | |
| | 4. Within the first two weeks of school, all 6th grade math teachers will give | | |
| | a preassessment available on the Teacher Resource page and | | |
| | collaboratively score the assessment. | | |
| | 5. Based on the state testing data made available over the summer and the | | |
| | results of the preassessment students will either: | | |
| | a. remain in Grade 6 Accelerated math, | | |
| | b. move to Grade 6 math or | | |
| | c. be offered the opportunity to test into Grade 7 Accelerated math. | | |
| | 6. If the decision results in a schedule change, families are contacted. | | |
| | 7. At each trimester, grade 6 teachers collaborate and review data sources | | |
| | below to ensure students are placed in a course appropriate for their rate | | |
| | and level. | | |
| | 8. As students transfer throughout the year, state testing data and the | | |
| | preassessment can be used to making placement decisions. | | |
| Data to determine | e At each trimester, possible sources of data for review include: | | |
| which students | Teacher recommendation | | |
| take the course | Formative assessment and other classroom data | | |
| | Local performance assessments (work sample) | | |
| | Benchmark & progress monitoring data | | |
| Implications | Students who are not successful at any point in the accelerated sequence may | | |
| implications | need to be moved into on-grade level courses, causing a repeat of some material. | | |
| | Students can feel like they are being challenged mathematically for the first time | | |
| | and have difficulty dealing with more rigorous expectations. Students may have | | |
| | difficulty balancing more rigorous expectations with their social and emotional | | |
| | needs. | | |
| Curriculum | College Preparatory Mathematics Core Connections compacted curriculum | | |
| Pedagogy | High leverage instructional strategies should be implemented when extending | | |
| | from the core instruction. These strategies should encourage students in their | | |
| | productive struggle with high cognitive demand tasks. Such strategies include | | |
| | Promoting a growth mindset | | |
| | Error analysis | | |
| | Posing purposeful questions | | |
| | Making connections between multiple math concepts | | |
| | Facilitating meaningful mathematical discourse | | |
| | Professional development on these and other strategies available by contacting | | |
| | the Instruction Department | | |
| | the files design Department | | |

After careful consideration it has been decided that your child would benefit from our Grade 6 Accelerated Math course.

Early in the school year state assessment data and class assessment data will be analyzed to ensure your child is placed at the appropriate rate and level. You will be contacted if a change is deemed appropriate.

While we are willing to offer this opportunity to your child, we also want to make sure parents and students have considered the pros and cons of accelerated learning before making a final commitment. Below is a list of potential pros and cons to think about:

| Pros | Cons |
|--|---|
| 1. Challenging coursework can help | 1. Students who are not successful at any |
| students remain more engaged in math | point in the accelerated sequence may |
| class. | need to be moved into on-grade level |
| | courses, causing a repeat of some |
| | material. |
| 2. Students may be in a class with other | 3. Students can feel like they are being |
| students who are as mathematically | challenged mathematically for the first |
| proficient as they are. | time and have difficulty dealing with |
| | more rigorous expectations. |
| | |
| 3. Advanced coursework may lead to an | 4. Students may have difficulty balancing |
| option of taking high school courses for | more rigorous expectations with their |
| college credit. | social and emotional needs. |

Once you have discussed the pros and cons with your child, if you would like to decline this offer, please contact me by: ______ otherwise they will be scheduled in Grade 6 Accelerated as we recommend.

If you have any questions, please contact me. Thank you!

Sincerely

The appendix of the Oregon's math standards states "students who are capable of moving more quickly deserve thoughtful attention, both to ensure that they are challenged and that they are mastering the full range of mathematical content and skills-without omitting critical concepts and topics. Care must be taken to ensure that **students master and fully understand all important topics in the mathematics curriculum, and that the continuity of the mathematics learning progression is not disrupted.**" The following guidelines disrupt the progression of mathematics learning by allowing students to skip instruction on sets of standards. **Great care must be taken in making the following decisions.**

Middle – Acceleration into 7A from Math 6

| | 4 4.1 16.1 . 0 1/16. 1 11 1/6 . 1 11 1/6 . 1 |
|------------------|--|
| Responsibilities | 1. At the end of trimester 2, Math 6 teacher identifies students that may be able to enter |
| • | Math 7A next year |
| | 2. Math 6 teacher begins supplementing the curriculum over trimester 3 so student can |
| | access 7th grade standards |
| | 3. AND/OR Math 6 teacher provides students with access to resources over the summer so |
| | they may test into 7A. |
| | 4. Parent letter is provided to the student. |

Middle – Acceleration from 5th grade into Math 7A

| Middle – Acceleration from 5 th grade into Math 7A | | | |
|--|--|--|--|
| Course | Grade 7 Accelerated | | |
| Recommended | Grade 6 students attend a Math 7A class as their normally scheduled math class. | | |
| Structure | | | |
| Responsibilities | 1. By April 15th, Middle school provides see 5th to 6th Transition form to feeder Elementary | | |
| | Schools. 2. By May 15th, 5th grade teacher recommendations and student samples of work are | | |
| | scanned and sent to middle school principals and cced to district math administrator. | | |
| | 3. By June 15th, middle schools math teams have made initial decisions on placement and | | |
| | mail letter to families for whom testing into 7A will be offered. | | |
| | 4. Within the first two weeks of school, all middle school math teachers will give a preassessment available on the Teacher Resource page and collaboratively score the | | |
| | assessment. | | |
| | 5. Based on the state testing data made available over the summer and the results of the | | |
| | preassessment students will either: | | |
| | a. remain in Math 7 Accelerated math, | | |
| | b. move to Math 6A math or c. move to Math 6 | | |
| | 6. If the decision results in a schedule change, families are contacted. | | |
| 7. At each trimester, grade 6 teachers collaborate and review data sources below | | | |
| | students are placed in a course appropriate for their rate and level. | | |
| Data to determine | At each trimester, possible sources of data for review include: | | |
| which students | Teacher recommendation Formative assessment data | | |
| take the course | Other classroom data | | |
| | Local performance assessments (work sample) | | |
| | Benchmark & progress monitoring data | | |
| Implications | Students who are not successful at any point in the accelerated sequence may need to be moved | | |
| impireations | into on-grade level courses, causing a repeat of some material. Students can feel like they are | | |
| | being challenged mathematically for the first time and have difficulty dealing with more rigorous expectations. Students may have difficulty balancing more rigorous expectations with their | | |
| | social and emotional needs. | | |
| Curriculum | | | |
| Pedagogy | High leverage instructional strategies should be implemented when extending from the core | | |
| Tedagogy | instruction. These strategies should encourage students in their <u>productive struggle</u> with high | | |
| | cognitive demand tasks. Such strategies include: | | |
| | Promoting a growth mindset | | |
| | Error analysis Posing purposeful questions | | |
| | Posing purposeful questions Making connections between multiple math concepts | | |
| | Facilitating meaningful mathematical discourse | | |
| | Professional development on these and other strategies available by contacting the Instruction | | |
| | Department | | |

| After careful consideration an assessment that may p | • | 1.1 | take |
|---|----------------|---------------------|-------|
| The test will occur on | | | |
| Based on the results of th Math 6 Accelerated or M | piaced in eith | ner Math / Accelera | atea, |

The test will assess whether or not students have a **strong and balanced** foundation in understanding advanced mathematical concepts, carrying out advanced mathematical procedures, and applying mathematics to solve a range of advanced problems aligned to Oregon state math standards for grades 6 and half of 7. For more information review the parent math resource pages on the Eugene 4j website.

While we are willing to offer this opportunity to your child, we also want to make sure parents and students have considered the pros and cons of accelerated learning before making a final commitment. Below is a list of potential pros and cons to think about:

| Pros | Cons |
|---|--|
| 1. Challenging coursework can help students remain more engaged in math class. | 1. Students will be skipping content standards causing gaps in their learning progressions. These gaps may not surface until later grades. |
| 2. Students may be in a class with other students who are as mathematically proficient as they are. | 2. Students who are not successful at any point in the accelerated sequence may need to be moved into on-grade level courses, causing a repeat of some material. |
| 3. Advanced coursework may lead to an option of taking high school courses for college credit. | 3. Students can feel like they are being challenged mathematically for the first time and have difficulty dealing with more rigorous expectations. |
| | 4. Students may have difficulty balancing more rigorous expectations with their social and emotional needs. |

Once you have discussed the pros and cons with your child, if you would like to decline this offer to test, please contact me by: ______ otherwise, we expect to see them at the above date and time.

If you have any questions, please contact me. Thank you! Sincerely,

High – Supporting Core

| 6 | Male Core | | | | | | |
|-------------------|---|--|--|--|--|--|--|
| Course | Math Support Class | | | | | | |
| Recommended | Students are scheduled into their grade level math class AND a math support | | | | | | |
| Structure | class. Math support and grade level teacher reevaluates students each trimester | | | | | | |
| | to determine if math support is still needed. | | | | | | |
| | | | | | | | |
| | A highly qualified math teacher or special educator teach the math support class. | | | | | | |
| | The teachers of the math support class and grade level math class are scheduled | | | | | | |
| | so that they can collaboratively plan at least weekly . | | | | | | |
| | | | | | | | |
| | Math support classes maintain a 1:15 teacher to student ratio. | | | | | | |
| | | | | | | | |
| Responsibilities | 1. By April 15th 8th grade math teachers provide high schools with a course | | | | | | |
| | recommendations. <u>See Placement Tool for 8th to 9th.</u> | | | | | | |
| | 2. 8th grade teacher recommendation is used to schedule students into math | | | | | | |
| | support. | | | | | | |
| | 3. Each subsequent trimester, the high school math team determines | | | | | | |
| | student placement in math support and communicates decisions with | | | | | | |
| D 1 | high school scheduler | | | | | | |
| Data to determine | A math support class should be offered to students who need additional support | | | | | | |
| which students | in order to access grade-level standards. Students are scheduled into a math | | | | | | |
| take the course | support class based on the following data sources: | | | | | | |
| | Teacher recommendation | | | | | | |
| | Formative assessment data | | | | | | |
| | Other classroom data | | | | | | |
| | Local performance assessments (work sample) | | | | | | |
| | Benchmark & progress monitoring data | | | | | | |
| | State Summative Assessments | | | | | | |
| Implications | Students may miss elective classes depending on the school's schedule. | | | | | | |
| | | | | | | | |
| Curriculum | Use the math support scope & sequence provided on the Teacher | | | | | | |
| | Resource Page to determine content | | | | | | |
| | During collaborative planning with grade level math teacher, identify | | | | | | |
| | problems in the CPM text or CPM parent guide aligned to the content | | | | | | |
| | Supplemental resources as guided by the <u>supplemental resource rubric</u> | | | | | | |
| Pedagogy | It is recommended that high leverage instructional strategies be implemented | | | | | | |
| | when supporting the core. These strategies should build <u>procedural</u> | | | | | | |
| | understanding from conceptual understanding. | | | | | | |
| | Such strategies include: | | | | | | |
| | <u>Strategy</u> based fact practice | | | | | | |
| | Emphasis on student discourse & reasoning (ie number talks) | | | | | | |
| | Representing mathematics multiple ways | | | | | | |
| | Connecting mathematical representations (words, equations, tables, | | | | | | |
| | graphs, pictures, etc.) | | | | | | |
| | Professional development on these and other strategies available by contacting | | | | | | |
| | the Instruction Department | | | | | | |

High – Acceleration from Math 8 to Algebra 2 Trimesters

| | The state of the Algebra 2 Trillesters | | | | | |
|-------------------|---|--|--|--|--|--|
| Course | Accelerated Algebra | | | | | |
| Recommended | Students are scheduled into Accelerated Algebra which covers the Algebra | | | | | |
| Structure | curriculum in two trimesters instead of three. | | | | | |
| | | | | | | |
| Responsibilities | 1. By April 15 th 8 th grade math teachers provide high schools with a course | | | | | |
| | recommendations. See <u>Placement Tool for 8th to 9th.</u> | | | | | |
| | 2. 8 th grade teacher recommendation is used to schedule students into | | | | | |
| | Algebra in 2 Trimesters. | | | | | |
| | 3. High school sends <u>parent letter</u> . | | | | | |
| | 4. At Trimester 1 PROG, the high school math team determined if the | | | | | |
| | student's placement is appropriate examining the data below. | | | | | |
| | 5. Reevaluation occurs again at Tri 1 Final and Tri 2 PROG | | | | | |
| Data to determine | Possible data sources: | | | | | |
| which students | 8th grade teacher recommendation based on the following criteria: | | | | | |
| take the course | Student scored 90% or higher on <u>all</u> 8th grade summative | | | | | |
| | assessments OR 90% of 8th grade learning targets at HP. | | | | | |
| | Student is highly proficient in demonstrating perseverance, self | | | | | |
| | motivation and ability to move at a faster pace. | | | | | |
| | 8th grade state summative assessment score | | | | | |
| | Formative assessment data r other classroom data | | | | | |
| | Local performance assessments (work sample) | | | | | |
| Implications | 1.0 Math credits earned due to inability to reach depth of standards in time | | | | | |
| | allotted | | | | | |
| Curriculum | Accelerated Algebra 1 Trimester 1: CPM Chapters 1-5 | | | | | |
| | Accelerated Algebra 1 Trimester 2: CPM Chapters 6-10 | | | | | |
| | Supplemental resources as guided by the supplemental resource rubric | | | | | |
| Pedagogy | As much as is developmentally appropriate, it is recommended that high | | | | | |
| 0 00 | leverage instructional strategies be implemented when accelerating from the | | | | | |
| | core. These strategies should build <u>procedural understanding from conceptual</u> | | | | | |
| | understanding. | | | | | |
| | Such strategies include: | | | | | |
| | Strategy based fact practice | | | | | |
| | Emphasis on student discourse & reasoning (ie number talks) | | | | | |
| | Representing mathematics multiple ways | | | | | |
| | Connecting mathematical representations (words, equations, tables, | | | | | |
| | graphs, pictures, etc.) | | | | | |
| | Professional development on these and other strategies available by contacting | | | | | |
| | the Instruction Department | | | | | |
| | | | | | | |

After careful consideration it has been decided that your child would benefit from our Accelerated Algebra 1 course that covers the same standards as Algebra 1 but in two trimesters as opposed to 3.

Early in the school year state assessment data and class assessment data will be analyzed to ensure your child is placed at the appropriate rate and level. You will be contacted if a change is deemed appropriate.

While we are willing to offer this opportunity to your child, we also want to make sure parents and students have considered the pros and cons of accelerated learning before making a final commitment. Below is a list of potential pros and cons to think about:

| Pros | Cons | |
|--|---|--|
| 1. Challenging coursework can help | Due to the inability to reach a great depth of | |
| students remain more engaged in math | understanding of the standards in two | |
| class. | trimesters only 1.0 Math credit will be earned as | |
| | opposed to 1.5 for a three-trimester course. | |
| 2. Students may be in a class with other | 2. Students who are not successful at any | |
| students who are as mathematically | point in the accelerated sequence may | |
| proficient as they are. | need to be moved into on-grade level | |
| | courses, causing a repeat of some | |
| | material. | |
| 3. Advanced coursework may lead to an | 3. Students can feel like they are being | |
| option of taking high school courses for | challenged mathematically for the first | |
| college credit. | time and have difficulty dealing with | |
| | more rigorous expectations. | |

Once you have discussed the pros and cons with your child, if you would like to decline this offer, please contact me by: _____ otherwise they will be scheduled in Accelerated Algebra as we recommend.

If you have any questions, please contact me. Thank you!

Sincerely

High – Acceleration by Dual Enrolling in Math

| | | | 1 and Casm | | | |
|---------------------------------------|---|-----------------------|-----------------------|------------------------|------------------------|------------------------|
| Course | Dual enroll in Algebra 1 and Geometry Dual enroll in Geometry and Algebra 2 | | | | | |
| D 1.1 | | | | | . 1 . | 1 • |
| Recommended | Students do | | | | | |
| Structure | 9 th Tri 1 | 9 th Tri 2 | 9 th Tri 3 | 10 th Tri 1 | 10 th Tri 2 | 10 th Tri 3 |
| | Alg1A | Alg1B | Alg1C& | GeoB | Alg2A | Alg2C |
| | | | GeoA | | | |
| | | | _ |)R | | |
| | 9 th Tri 1 | 9 th Tri 2 | 9 th Tri 3 | 10 th Tri 1 | 10 th Tri 2 | 10 th Tri 3 |
| | Alg1A | Alg1B | Alg1C | GeoA | GeoB & | Alg2C |
| | | | | | Alg2A | |
| Responsibilities | Grade | e level math | teacher, st | udent or far | nily request | <u></u> _ |
| | accel | eration in n | nath | | | |
| | 0 | Grade leve | l math teacl | her recomm | endation re | equired |
| | Grade level math teacher recommendation required Counselor sends parent letter | | | | | |
| | Counselor/Math teacher check student progress every two | | | | | |
| | weeks during "doubled up" trimester to ensure appropriate | | | | | |
| | place | 0 | | | | |
| Implications | Increased work-load for the student may result in decreased quality | | | | | |
| | of engagement and learning. | | | | | |
| Curriculum | COLLEGE PREPARATORY MATHEMATICS Core Connections Series | | | | | |
| Pedagogy | It is recommended that high leverage instructional strategies be | | | | | |
| | implemented when students are doubled-up in math class. These | | | | | |
| | strategies should <u>facilitate student connection between</u> | | | | | |
| | mathematical representations. | | | | | |
| | Such strategies include: | | | | | |
| | Emphasis on student discourse & reasoning (ie number talks) | | | | | |
| | Representing mathematics multiple ways | | | | | |
| | Explicitly connecting mathematical strands (Algebra, | | | | | |
| | Geometry, Statistics) | | | | | |
| | Professional development on these and other strategies available by | | | | | |
| | contacting the Instruction Department | | | | | |
| contacting the instruction Department | | | | | | |

| Dear Parent/Guardian, | |
|---|---|
| After careful consideration it has been dual enrolling in <u>Algebra 1 & Geometry</u> | decided that your child would benefit from OR Geometry & Algebra 2. |
| Every two weeksis an appropriate option. | will check in with your child to ensure this |

While we are willing to offer this opportunity to your child, we also want to make sure parents and students have considered the pros and cons of accelerated learning before making a final commitment. Below is a list of potential pros and cons to think about:

| Pros | Cons |
|---|--|
| 1. Challenging coursework can help students remain more engaged in math class. | 1. Students who are not successful at any point in the accelerated sequence may need to be moved into on-grade level courses, causing a repeat of some material. |
| 2. Students may be in a class with other students who are as mathematically proficient as they are. | 3. Students can feel like they are being challenged mathematically for the first time and have difficulty dealing with more rigorous expectations. |
| 3. Advanced coursework may lead to an option of taking high school courses for college credit. | 4. Students may have difficulty balancing more rigorous expectations with their social and emotional needs. |

Once you have discussed the pros and cons with your child, if you would like to decline this offer, please contact me by: _____ otherwise they will be scheduled as we recommend.

If you have any questions, please contact me. Thank you!

Sincerely

High – Acceleration into Geometry or Algebra 2 in 9th Grade

| Course | Geometry or Algebra 2 | | | | | |
|------------------|--|---|--|--|--|--|
| Criteria | Geometry | Algebra 2 | | | | |
| Gricoria | Algebra Credit from MS: | Geometry Credit from MS: | | | | |
| | B in Algebra as an 8th grader | B in Geometry as an 8th grader | | | | |
| | AND | AND | | | | |
| | 90% on summative assessment | 90% on summative assessment | | | | |
| | OR proficient on all KEY LT and | OR proficient on all KEY LT and | | | | |
| | at least AP on all remaining | at least AP on all remaining | | | | |
| | LT's) | LT's) | | | | |
| | *Students not meeting above | *Students not meeting above | | | | |
| | requirements for Algebra credit as an | requirements for Geometry credit as | | | | |
| | 8th grader may (with 8th grade teacher | an 8th grader may (with 8th grade | | | | |
| | recommendation) enroll in Geometry | teacher recommendation) enroll in | | | | |
| | as a 9 th grader but must take 2 math | Algebra 2 as a 9th grader but must | | | | |
| | classes beyond Geometry to meet | ensure they meet the graduation | | | | |
| | graduation requirements of 3 credits. | requirements of 3 credits. | | | | |
| Responsibilities | | ers provide high schools with a course | | | | |
| | recommendations. See <u>Placement</u> | | | | | |
| | 2. 8th grade teacher recommendation | n is used to schedule students into | | | | |
| | Algebra in 2 Trimesters. 3. High school sends parent letter. | | | | | |
| | | and math team determined if the | | | | |
| | 4. At Trimester 1 PROG, the high school math team determined if the student's placement is appropriate examining the data below. | | | | | |
| | 5. Reevaluation occurs again at Tri 1 Final and Tri 2 PROG | | | | | |
| Data | Possible data sources: | | | | | |
| Dutu | 8 th grade teacher recommendation | n based on the following criteria: | | | | |
| | | her on <u>all</u> 8 th grade summative | | | | |
| | assessments OR 90% of 8th grade learning targets at HP. | | | | | |
| | Student is highly proficient in demonstrating perseverance, self- | | | | | |
| | motivation and ability to move at a faster pace. | | | | | |
| | 8th grade state summative assessment score | | | | | |
| | Formative assessment data or other classroom data | | | | | |
| | Local performance assessments (work sample) | | | | | |
| Implications | Students on track to take math classes for college credit | | | | | |
| Curriculum | COLLEGE PREPARATORY MATHEMATICS Core Connections series | | | | | |
| Pedagogy | High leverage instructional strategies should be implemented when extending | | | | | |
| | from the core instruction. These strategies should encourage students in their | | | | | |
| | <u>productive struggle</u> with high cognitive demand tasks. Such strategies include: | | | | | |
| | Promoting a growth mindset | | | | | |
| | Error analysis | | | | | |
| | Posing purposeful questions | | | | | |
| | Making connections between multiple math concepts | | | | | |
| | Facilitating meaningful mathemat | | | | | |
| | Professional development on these and oth | her strategies available by contacting | | | | |
| | the Instruction Department | | | | | |

After examining the following criteria, your student <u>has/has not</u> earned high school math credit in <u>Algebra/Geometry</u>.

- B in in Algebra/Geometry as an 8th grader AND
- 90% on summative assessment OR
- proficient on all KEY LT and at least AP on all remaining LT's

After careful consideration it has been decided that your child would benefit from enrolling in <u>Geometry/Algebra 2</u> as a 9th grader.

While we are willing to offer this opportunity to your child, we also want to make sure parents and students have considered the pros and cons of accelerated learning before making a final commitment. Below is a list of potential pros and cons to think about:

| Pros | Cons |
|--|--|
| 1. Challenging coursework can help students remain more engaged in math class. | 1. Students who are not successful at any point in the accelerated sequence may need to be moved into on-grade level courses, causing a repeat of some material. |
| students who are as mathematically proficient as they are. | 3. Students can feel like they are being challenged mathematically for the first time and have difficulty dealing with more rigorous expectations. |
| 3. Advanced coursework may lead to an option of taking high school courses for college credit. | 4. Students may have difficulty balancing more rigorous expectations with their social and emotional needs. |

Once you have discussed the pros and cons with your child, if you would like to decline this offer, please contact me by: _____ otherwise they will be scheduled as we recommend.

If you have any questions, please contact me. Thank you!

Sincerely

Supplemental Math Resources Review

Purpose: This is a tool for educators to review and determine the quality of a supplemental math resource and to make well-informed decisions about the best use of the supplemental resource. Supplemental math resources are any resources used outside of the Core math curriculum.

Directions: Briefly use the supplemental math resource (with/without students) so that you are familiar with the functionality. Then rate the resource on each criterion. Finally, complete the back with recommendations on when, how and how often to use the resource. Share your review with the district math specialist. Ideally, multiple educators should review a resource independently and come to consensus on recommended use.

| Name of Resource: | | _ Publisher/Access info | rmation: | | Cost: |
|-------------------------|-------------------|-------------------------|-------------------------|----------------------|-------|
| | | | | | |
| Rating Scale: | | | | | |
| 4: Exceeds the criteria | 3: Adheres to the | 2: Sometimes adheres | 1: Occasionally | 0: Rarely adheres to | |
| | criteria | to the criteria | adheres to the criteria | the criteria | |

| Highest Priority Criteria | Rating | Additional Criteria | Rating | Additional Criteria | Rating |
|-------------------------------------|--------|-------------------------------------|---------------------------------------|--------------------------------------|--------|
| *Addresses CCSS Mathematics | | Engages students in productive | | Provides differentiation for | |
| standards | | struggle through relevant thought- | \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ | students above and below grade | |
| | | provoking questions (MP**1) | | level. | |
| *Consistent with the learning | | Provides sufficient opportunities | | Supports diverse cultural and | |
| progressions in CCSS | | for students to reason and explain. | | linguistic backgrounds, interest and | |
| | | (MP2&3) | | styles. | |
| *Provides opportunities for | | Encourages the strategic use of | | Uses technology and media to | |
| students to apply concepts in real- | | concrete or abstract tools such as | | deepen learning. | |
| world situations | | pictures, models, expressions, and | | | |
| | | technology based tools. (MP4&5) | | | |
| *Develops understandings through | | Encourages precise and accurate | | Cultivates student interest and | |
| conceptual problems, questions | | mathematics. (MP6) | | engagement in math. | |
| and multiple representations | | | | | |
| *Expects, supports and provides | | Encourages students to build new | | Uses varied modes to assess student | |
| guidelines for procedural skill and | | concepts on patterns & | | understanding (selected response, | |
| fluency after conceptual | | generalizations of prior | | constructed/extended response, | |
| understanding has been developed | | knowledge. (MP7&8) | | self-assessment, etc.) | |

^{*}Highest Priority Criteria are criteria that reflect the key instructional shifts of the Common Core State Standards

^{**}MP indicates a connection to one of the eight Mathematical Practices of the Common Core State Standards

Recommendations:

Supplemental math resources do not need to meet all the criteria in order to be used. Educators should take the number of met criteria into consideration as they make informed recommendations for when, how and how often to use the resources with students.

When?

| | *************************************** |
|--|---|
| Grade Level(s): | |
| CCSS this supplement is recommended for: | |
| If applicable, what specific connections are there to core curriculum? (ie. this supplements Chapter 2 of CPM Algebra really well) | |

How?

| Intervention: yes or no | Extension: yes or no | Independent Practice: yes or no | Whole Group: yes or no |
|-------------------------------|-------------------------------|---------------------------------|-------------------------------|
| (briefly describe appropriate | (briefly describe appropriate | (briefly describe appropriate | (briefly describe appropriate |
| examples) | examples) | examples) | examples) |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

| | How Often? | |
|--|---|----------------------------|
| Note: Supplemental resources should not exceed roughly 15% | of math instructional time. Contact dis | trict math specialist with |
| questions/concerns regarding this benchmark. | | |
| | _ mins/day | mins/week |
| Additional Comments: | | |
| | | |

4j Single Subject Acceleration Form Math

For the Teacher: Review each category and the list of descriptors. Assign an overall rating for each using the scale below. These scores will be used to determine if the student is eligible for single subject acceleration.

Scale:

1 = Typical for grade/age

3 = Quite advanced for grade/age

2= Above average for grade/age

4 = Remarkable for grade/age (1 in 50)

| Oualities | | Score |
|--|--|-------|
| 1. Ability to Learn Mathematics Demonstrates in-depth knowledge Displays persistent, intense focus on one or more topics Is highly reflective and/or sensitive to his/her environment Uses prior knowledge to solve new problems Solves problems by looking for patterns Analyzes difficult problems and perseveres in solving them | Precise in math work Thinks about numbers in many ways Explains thinking and critiques thinking of others Shows work in multiple ways Learns skills independently and connections without formal instruction | Score |
| 2. Application of Knowledge Demonstrates highly developed reasoning Employs complex problem-solving strategies Uses and interprets advanced symbol systems in academics Understands, applies, transfers abstract concepts 3. Creative/Productive Thinking Sees the familiar in unusual ways/ Does not conform to typical ways of thinking or perceiving Is highly creative and/or inventive Demonstrates unusual fluency and flexibility in thinking and problem-solving Expresses ideas, feelings, experiences, and/or beliefs in original way | Uses technology in advanced applications Acts facilitator to help others Makes advanced connections and transfers learning to other subjects, situations, cultures Submits high-quality assignments Is highly curious Generates new ideas, new uses, new solutions easily Perceives and manipulates patterns, colors, and/or symbols Displays keen sense of humor | |
| 4. Exceptional Motivation to Succeed Demonstrates ability to lead large and/or small groups Meets exceptional personal and/or academic challenges Explores, researchers, questions topics, ideas, issues independently | Exhibits a strong sense of responsibility Demonstrates exceptional ability to adapt to new experiences Strives to achieve high standards Shows initiative, self-direction, and/or high level of confidence | |

5th to 6th Math Transition

| Student | Name: |
|---------------------------------------|---|
| | (First and Last) |
| 5 th Math Teacher's Name: | Elementary School: |
| IEP: Math Read 504: Yes No | CICO: Yes No If yes, please attach card with goals Behavior Plan? Yes No |
| Reading Level Impacts Math Achiev | vement? Yes No If yes, please explain: |
| | |
| | Student Profile |
| Please compare this student against a | III fifth graders taught in your career |

Please compare this student against **all** fifth graders taught in your career.

Assign a score of **1** if Assign a score of **2** if Assign a score of **3** if he/she is very weak he/she is weak

he/she is average

Assign a score of 4 if he/she is strong

Assign a score of 5 if he/she is very

strong

| Observed Behavior Reporting | | | | |
|---|---|---|---|-----|
| 1) Social-Emotional skills: self and other awareness, mood management, self-motivation, empathy, | | 2 | 3 | 4 5 |
| management of relationships, conflict management. | | | | |
| 2) Organizational skills: has and brings supplies to class, daily assignments kept up, homework done | | 2 | 3 | 4 5 |
| and turned in, well-organized notebook, folder, etc. | | | | |
| Oregon Math Standards Reporting | | | | |
| 1) Operations and Algebraic Thinking: writes and interpret numerical expressions, analyzes patterns | 1 | 2 | 3 | 4 5 |
| and relationships. | | | | |
| 2) Number and Operations in Base Ten: understands the place value system, performs operations | | 2 | 3 | 4 5 |
| with multi-digits whole numbers and with decimals to the hundredths. | | | | |
| 3) Number and Operations - Fractions: add, subtract, multiply and divide fractions. | | 2 | 3 | 4 5 |
| 4) Measurement and Data: converts units, represents and interprets data, understands concept of | | 2 | 3 | 4 5 |
| volume. | | _ | 3 | т Ј |
| 5) Geometry: graph points on the coordinate plane to solve real-world problems, classify two- | 1 | 2 | 3 | 4 5 |
| dimensional figures by their properties. | | | Ū | |
| 7) Math Practices: analyzes difficult problems and perseveres in solving them, is precise in math work, | | 2 | 3 | 4 5 |
| thinks about numbers in many ways, explains thinking and critiques thinking of others, show work in | | | | |
| multiple ways, use prior knowledge to solve new problems, solves problems by looking for patterns. | | | | |
| | | | | |

Individual insights or concerns on this student:

My 6th grade math class recommendation(s) for this student is: (circle)

. Math 6

(default selection)

Math Support: (Profile score of 1's or 2's) Math 6A

(Profile scores of 4's and up)

Test for Math 7A (Profile scores of 5's)

Contextualized, problem solving course on 6th grade standards.

Student enrolls in this course AND Math 6 Reteach & preteach of standards to support access of grade-level math

Contextualized, problem solving course on 6th grade standards plus half of 7th grade standards. Course moves quickly and demands an excellent work ethic.

Contextualized, problem solving course on 7th grade standards plus half of 8th grade standards. Students would be skipping 6th and half of 7th grade standards. Course moves quickly and demands an excellent work ethic.

Next Steps

- 1. Locate a sample of student work demonstrating student's typical level of Math Practices
- 2. Scan ALL your classes forms and samples of work
- 3. Email to your principal, receiving middle school's principal and district math administrator