Disclaimer: This sheet contains <u>resources shared</u> by users of IM 6–8 Math and IM 9–12 Math. IM has not reviewed these resources for quality. The presence of a resource in this sheet should not be interpreted as an endorsement by IM.

Last updated 2020-07-11

Have you made something cool for IM 6-12 Math? Share it with this form.

General IM 6-8 Math

- Link 1 and Link 2. Direct links to Geogebra Applets in IM 6–8 Math.
- <u>Link</u>- Khan Academy practice problems.
- Link Jennifer Wilson & Kevin Liner. A list of all routines for middle school, sorted by routine/course/unit/lesson
- Link Maggie Hackett. IM Sequence of Lessons with AZ Standards Alignment Since AZ adopted new standards in Dec 2016, I found it
 necessary to make an alignment document. On the 4th tab are links to the Summary and Revisions documents so that teachers can
 see exactly how standards with an "*" have changed.
- <u>Link</u> <u>Kate Nowak</u>. Materials / supplies for the year by grade level with more details about quantities needed.
- <u>Link</u> <u>Mary Dooms</u>. Collection of pre-teaching and reteaching materials created for math intervention as well as our Title I after school math program.

Grade 6 General

- <u>Link</u> Jennifer Wilson. Google Slide decks for each lesson can be copied & edited as desired can be downloaded as PPT/PDF and converted to notebook/flipcharts as desired.
- <u>Link</u> <u>Kelly McCormick</u>. Resources organized by unit.
- Link Emily Hooks. Unit quizzes, cool downs, study guides, and tests (reformatted for multiple choice, open ended, and made longer)
- Link Ashlee Nichols. Unit overviews (lesson goals, vocabulary & blackline master) for a quick glance at the purpose of each lesson.
- Link Ashlee Nichols. 6th grade alignment guide (Lessons by standard, standards/learning goals by lesson).
- Link Norma Gordon. Units 1–8. Student Learning Targets checklist.
- <u>Link</u> <u>Erin Pickle</u>. Units 1-6. Student math journal pages, extra assessments, extra practice.

Grade 6 Unit 1: Area and Surface Area

- <u>Link</u> Angela Lynch. Quizlet vocabulary sets.
- <u>Link</u> <u>Cindy Whitehead</u>. Lessons 1-18 in Desmos Activity Builder.
- Link Rachel. More practice finding shaded regions by subtracting (e.g. Lesson 6 PP 6), with a worked example.
- <u>Link</u> <u>Rachel</u>. Study guide for mid-unit assessment, but harder than the actual test. The composite shape looks like it isn't aligned with the grid in Drive preview, but seems ok when the pdf is downloaded.
- Link Rachel. Pre-unit Review. IM-style lesson on volume, using some Grade 5 IM tasks (I used as intro but could be review if needed; use at any point prior to L16)
- <u>Link</u> <u>Marilou Dietz</u>. Quiz for Lessons 1-6. (<u>key</u>)
- Link Marilou Dietz. Practice test for Mid-Unit Assessment using practice problems from lessons
- <u>Link</u> <u>Caitlin Yates</u>. Here is an alternate version of the mid-unit assessment. Can be used for study guides, multiple test versions, and/or retakes.
- <u>Link</u> <u>Rachel</u>. Unit review. Whole unit review game problem sets, many taken from U1 practice problems (ghosts in the graveyard remix/see blog post)
- Link Rachel. End-of-Unit-1 Assessment study guide
- Link Rachel. Lesson 2 extension/additional challenge tangram task.
- Link Nathan Kraft. Lesson 3, Act 2: On the Grid. Desmos Activity Builder.
- <u>Link</u> <u>Jamie Munn</u>. Lesson 5. Desmos Activity Builder: 6.1.5 (Grade 6, Unit 1, Lesson 5) Omits the warmup (we did that on a separate worksheet), added a CARD SORT and interactive features for each activity.
- Link Rachel. Lesson 5. More practice labeling base and height of parallelograms.
- Link Jamie Munn. Lesson 6. Desmos Activity Builder for 6.1.6 (grade 6, unit 1, lesson 6). This is the complete lesson, including warmup. Question 6.2.2 is modified.
- Link Rachel. Lesson 8. Extra practice (parallelograms and decomposing into two identical triangles)
- Link Lydia Kirkman. Lesson 9, Act 1: Bases and Heights of a Triangle. Desmos card sort for warm up activity
- Link Rachel. Lesson 10. AYR4M as a worked example, then more practice with similar problems and mixed review.
- <u>Link</u> <u>Rachel</u>. Lesson 15. More practice drawing and labeling nets, like PP 3.
- <u>Link</u> <u>Rachel</u>. Lesson 16. Did a fun extension/modification for Lesson 16 (See 16A/B), but was only possible b/c we'd done more work earlier on isometric drawing...this was my iso drawing tutorial/practice handout
- Link Rachel. Lessons 17-18. A Kahoot to practice surface area, volume, and expressions with exponents.
- Link Rachel. Lesson 18. Practicing expressions with exponents for volume and surface area, plus some extension tasks.

Grade 6 Unit 2: Introducing Ratios

- <u>Link</u> Angela Lynch. Quizlet vocabulary sets.
- <u>Link</u> <u>Cindy Whitehead</u>. Lessons 1-2 in Desmos Activity Builder.

Grade 6 Unit 3: Unit Rates and Percentages

Grade 6 Unit 4: Dividing Fractions

Grade 6 Unit 5: Arithmetic in Base Ten

• Link - Nicole Ayers. Lesson 8: Calculating Products of Decimals. Pin the Point on the Product; a Kahoot practicing proper placement of the decimal when multiplying

Grade 6 Unit 6: Expressions and Equations

- Link Lora Smid. Lesson 2: Truth and Equations. Desmos version of most of the lesson
- Link <u>Nathan Kraft</u>. Lesson 3: Staying in Balance. This Desmos activity helps students use the balance hangers to develop strategies for solving one-step equations. Some of this is interactive with hangers that actually tilt one way or the other and are balanced once the student finds the right value. Special thanks to Cindy Whitehead for some of her ideas.
- Link Valia Bourmpoula. Lesson 3: Staying in Balance. It is simply most of the lesson (excl. the warm-up) in DESMOS.
- <u>Link</u> <u>Valia Bourmpoula</u>. This is simply a DESMOS version of the activity, with the goal of making the student's discussions more engaging.
- <u>Link</u> <u>Mary Dooms</u>. The Socrative activity reviews major concepts from Unit 6 Lessons 6.1-6.11 and gives students an opportunity for additional practice prior to assessment.

Grade 6 Unit 7: Rational Numbers

Grade 6 Unit 8: Data Sets and Distributions

- Link Rachel H. Second half of Lesson 1. Desmos. Practice deciding if data is numerical or categorical, mostly self-checking.
- Link Rachel H. Lesson 2 (partial) Desmos self-checking version.
- Link Rachel H. Lessons 1-3. Desmos. Short set of mostly self-checking practice problems.

- Link Sallie Kaan. Lesson 2, Act 4: Sifting for Statistical Questions. DESMOS card sort for 6.8.2.4.
- Link Rachel H. Lesson 3 Desmos version.
- Link Rachel H. Lesson 4 Desmos version.
- Link Rachel H. Lesson 5 Desmos version.
- Link Rachel H. Lesson 5 Desmos version.
- Link Sallie Kaan. Lesson 8, Act 2: Sorting Histograms. DESMOS Card Sort.
- Link Sallie Kaan. Lesson 14, Activity 4: Mean or Median? Desmos Card Sort.
- •

Grade 6 Unit 9: Putting it All Together

Grade 7 General

- <u>Link</u> Jennifer Wilson. Google Slide decks for each lesson can be copied & edited as desired can be downloaded as PPT/PDF and converted to notebook/flipcharts as desired.
- <u>Link</u> <u>Kelly McCormick</u>. Resources organized by unit.

Grade 7 Unit 1: Scale Drawings

Grade 7 Unit 2: Introducing Proportional Relationships

Grade 7 Unit 3: Measuring Circles

Grade 7 Unit 4: Proportional Relationships and Percentages

Grade 7 Unit 5: Rational Number Arithmetic

- Link Sarah Martin. Lessons 1-6. Instead of students doing practice problem the old fashion way I have created a Quizlet card set that you can use.
- <u>Link</u> <u>Chasity Gregory</u>. Lesson 1, Act 4: Rational Number Card Sort Activity. Google Drawing of the Card Sort (this is part 1). You can assign in G Classroom and allow each student to get their own copy.
- Link Sarah Martin. Lesson 3: Changing Elevation. Google Draw match the integer to the addition equation
- Link Rachel. Lesson 7: Adding and Subtracting to Solve Problems. More practice with "difference" vs. "distance" and number line scaffold for PP 3
- Link Maggie. Lesson 10, Act 2: Matching Expressions. I put the table into the desmos card sort to allow for more flexible groupings as the students work.
- Link Morgan Stipe. Lesson 10, Act 2: Matching Expressions. Here's a digital version of the sort within Google Drawings. I'll post this as an assignment in Google Classroom so the students will each get their own copy to sort online.
- <u>Link</u> <u>Morgan Stipe</u>. Lesson 13, Act 2: Card Sort: The Same But Different. This is a Desmos version of the card sort for expressions. The synthesis is also included as true/false questions for discussion, along with ordering the answers, which was labeled as optional in the lesson plan. Enjoy!
- Link Rachel. Lesson 13, Act 4.reteach/scaffold/bridge to Khan Academy task.
- Link Morgan Stipe. Lesson 15, Act 4: Card Sort: Matching Inverses. Desmos Card Sort: Matching Additive and Multiplicative Inverses
- Link Renee Ditz. Grade 7 Unit 5 Review for end of unit assessment
- Link Nicole Ayers. Pre-Unit 5 Assessment in Kahoot! format.
- <u>Link</u> <u>Sarah Martin</u>. Scavenger Hunt as a review for unit 5.

Grade 7 Unit 6: Expressions, Equations, and Inequalities

- Link Rachel. Lessons 2-5. Tape diagrams reteaching/scaffolds 1
- <u>Link</u> <u>Rachel</u>. Lessons 2-6. Tape diagrams reteaching/scaffolds 2
- <u>Link</u> <u>Liz Frederickson</u>. Lesson 7, Act 2: Hanger and Equation Matching. This is a good activity to do prior to 7.2. Solve Me Mobiles gives students a digital platform to practice balancing hanger diagrams for equations with instant feedback in a game atmosphere, before they start matching equations with the hanger diagrams.
- Link Sarah Martin. Unit Scavenger Hunt

Grade 7 Unit 7: Angles, Triangles, and Prisms

- <u>Link</u> <u>Valia Bourmpoula</u>. Lesson 5, Act 2: What Does It Look Like? It is a DESMOS-format of activity 2, hoping it can encourage more discussions between partners.
- <u>Link</u> <u>Sarah Martin</u>. Lesson 2, Act 3: Is it a Complement or Supplement? This is a Desmos Activity that includes a cart sort and finding missing angle measures of complementary and supplementary angles.
- Link Sallie Kaan. Card Sort for Lesson 11.3: Cross Sections
- Link Sallie Kaan. Card Sort for Lesson 15.3: Surface Area or Volume
- <u>Link</u> <u>Nicole Ayers</u>. Kahoot! game for pre-unit 7 assessment

Grade 7 Unit 8: Probability and Sampling

- <u>Link Linda Smith</u>. This sheet lists suggested materials and alternative materials by lesson and activity for Grade 7 Unit 8: Probability and Sampling. Students need experience with a variety of simulation materials in Lessons 1-9 to be prepared to design their own simulations in Lesson 10: Designing Simulations as required by standard 7.SP.C.8.c.
- Link Cassandra Yonash. Lesson 3 Hyperdoc alternative. Hyperdoc for students to complete exploring experimental and theoretical probability
- Link Cassandra Yonash. Lesson 9 Hyperdoc alternative. Note: some suggested activities in this doc focus on high school standards in the domain Conditional Probability and the Rules of Probability.

Grade 8 General

- <u>Link</u> <u>Jennifer Wilson</u>. Google Slide decks for each lesson can be copied & edited as desired can be downloaded as PPT/PDF and converted to notebook/flipcharts as desired.
- Link Maritte Green. Flipcharts for use in ActivInspire from the Google Slide presentations for each lesson
- <u>Link</u> <u>Kelly McCormick</u>. Resources organized by unit.

Grade 8 Unit 1: Rigid Transformations and Congruence

- Link Lindsey Cade. This folder contains the 8th grade materials that have been modified for SPED and ELL students (Units 1 and 2 are not actually modified, more like heavy scaffolding). I will add to this folder as I create them. Right now (Sept 7) it contains Unit 1, Lessons 1-15 and the Mid-Unit Assessment.
- <u>Link</u> <u>Cindy Whitehead</u>. Lessons 1-16 in Desmos Activity Builder.
- <u>Link</u> <u>Bridget Dunbar</u>. Desmos Polygraph on Rigid Transformations and WODB as warm-up in blog post. Can work at the point that you see fit.
- <u>Link</u> <u>Anne Agostinelli</u>. Lesson 4, Activity 2. Modified Activity to allow students to move and practice vocab through listening, speaking, and writing.
- The Nearpod includes warm-up through cool down. You may edit to use any components desired.
- <u>Link</u> <u>Patty Tracey</u>. After Lesson 5 or 6. This is a quiz modification for ESL students.
- Link Sara Vaughn. This is a Desmos activity created because Unit 1, Lesson 15, Activity 2 needed to be revisited.

Grade 8 Unit 2: Dilations, Similarity, and Introducing Slope

- Link Lindsey Cade. This folder contains the 8th grade materials that have been modified for SPED and ELL students (Units 1 and 2 are not actually modified, more like heavy scaffolding). I will add to this folder as I create them. Right now (Sept 7) it contains Unit 1, Lessons 1-15 and the Mid-Unit Assessment.
- Link Cindy Whitehead. Lessons 1-2 in Desmos Activity Builder.

•

Grade 8 Unit 3: Linear Relationships

- Link Rachel H. Lessons 1-3. Some practice problems adapted to be self-checking Desmos screens.
- Link Rachel H. Lesson 2 classwork/Desmos version.
- Link Rachel H. Lesson 5 Practice Problems, self-checking Desmos edition.
- Link Rachel H. Lesson 7 Classwork, Desmos self-checking version.
- <u>Link</u> <u>Rachel H</u>. Lesson 8 (partial) Desmos self-checking version.
- Link Rachel H. Lesson 9. Desmos self-checking version.
- <u>Link</u> <u>Rachel H</u>. Lesson 10. Desmos self-checking version.
- Link Rachel H. Lesson 11. Desmos self-checking version, but not the perimeter problem, which will do separately
- Link Rachel H. Desmos AP Collection for the unit.

Grade 8 Unit 4: Linear Equations and Linear Systems

Grade 8 Unit 5: Functions and Volume

- Link Rachel H., Lesson 5. More practice with graphs of situations, this time with function language. The last screen is PP#1 from Lesson 5. The first 7 screens are from a Shell Center Language of Functions and Graphs activity, which can be downloaded here: https://www.mathshell.com/materials.php?series=tss&item=lfg. Note that on these screens, students should pick only ONE graph to match the situation. (Planning to use this with teacher pacing tools/to facilitate discussion.)
- Link Rachel H. Lesson 5. The table in L 16 is a great missing dimension practice format. Made another one to use after L20/21, and a blank to make it easy to make more.

Grade 8 Unit 6: Associations in Data

Grade 8 Unit 7: Exponents and Scientific Notation

- Link Lisa O'Neill. Lesson 4, Activity 4: Dividing Powers of 10. Teacher-created columns for "Making Millions" activity with rules at the top of each column.
- <u>Link</u> <u>Lisa O'Neill</u>. Lesson 10: Representing Large Numbers on the Number Line. Additional practice with using tick marks and placing large numbers on the number line.

Grade 8 Unit 8: Pythagorean Theorem and Irrational Numbers

• <u>Link</u> - <u>Kristen Taylor</u>. Desmos Lesson 12, activity 3. "The purpose of this activity is for students to use rational approximations of irrational numbers and to match irrational numbers to equations they are solutions to. To do this, students sort cards into sets of three consisting of: A square or cube root value, An equation of the form x² = p or form x³ = p that the value is a solution to A number line showing the location of the value"

•

Grade 8 Unit 9: Putting it All Together

General IM 9–12 Math

- Link Patti Drawdy. Materials for HS Course and lesson-level details with estimated quantities
- Link Jennifer Wilson. a list of all routines for high school, sorted by routine/course/unit/lesson.
- <u>Link</u> <u>Jennifer Wilson</u>. This document contains technology-use requirements at-a-glance, by lesson, for high school units so that teachers who need to check out devices will have a quick way to plan which days devices are needed.

Algebra 1 General

Algebra 1 Unit 1

- Link Jennifer Davis. Lessons 1-5 in PowerPoint.
- Link Korie Whiteman. Lesson 4, Act 2: Matching Distributions. Desmos card sort.
- Link Daniel Wekselgreen. Lesson 5: Calculating Measures of Center and Variability. This provides an additional lesson to help develop the concept of MAD in a more visual way (just using the table in lesson 5 was not sufficient for my students).
- Link Jim Dougherty. Slide Decks, Desmos activities (to be done concurrent to lessons, Exit Tickets and Homework in various apps, Desmos self-correcting homework in progress (currently completing unit 2, anticipate completion of all units by August)

Algebra 1 Unit 2

Algebra 1 Unit 3

Algebra 1 Unit 4

• Link - Denis Cook. Lesson 10, Act 2: Card Sort: Possible or Impossible? Desmos version.

Algebra 1 Unit 5

• Link - Denis Cook. Lesson 6, Act 3: Card Sort: Matching Descriptions to Graphs. Desmos version.

Algebra 1 Unit 6

• Link - Caroline Karr. Desmos versions of Lessons 1, 2, and 4 (as of 4/14/2020). More to be added.

Algebra 1 Unit 7

Algebra 1 Unit 8

Geometry General

Geometry Unit 1

• <u>Link</u> - <u>Jess Hurst</u>. This is an extension project for unit one for an honors section of Geometry. The student is a design intern and must research, provide the history, and give descriptions of transformations in tessellations found around the world.

Geometry Unit 2

• Link - Julie Kirkpatrick. This is to show an example of why SAS works, and provides an interactive counterexample to play with.

Geometry Unit 3

Geometry Unit 4

Geometry Unit 5

Geometry Unit 6

Geometry Unit 7

Geometry Unit 8

Algebra 2 General

Algebra 2 Unit 1

• <u>Link</u> - <u>Michael Sipes</u>. Lesson 7: Representing More Sequences. Desmos Card Matching Activity, my students where having difficultly with vocabulary, terminology involving sequences and the recursive definitions, and sequences represented as tables and graphs. I made this card matching activity to help review this concepts with them.

Algebra 2 Unit 2

• Link - Katie Walker. Lessons 3, 5, and 17. Desmos Card sorts.

Algebra 2 Unit 3

Algebra 2 Unit 4

Algebra 2 Unit 5

• Link - Denis Cook. Lesson 5, Acts 2 & 3. Both Card Sorts in Desmos.

Algebra 2 Unit 6

Algebra 2 Unit 7