

## Lincoln Public Schools

6 Ballfield Road Lincoln, Massachusetts 01773 781-259-9400 ext 4201 • FAX: 781-259-9246

> Patricia Kinsella Assistant Superintendent of Schools

May 11, 2017

Dear Parents/Guardians:

We are delighted to announce that the district has selected <u>Connected Mathematics Project 3</u> (CMP3) as the new curriculum program for middle school mathematics in the Lincoln Public Schools. Students in grades 6-8 will begin using the new program in September, 2017.

CMP3 was the unanimous choice of the thirteen members of the Middle School Math Materials Review Committee. The Committee included middle school math teachers, Special Educators, the Content Specialist for Middle School Math, the Principals of Hanscom Middle School and Lincoln School 5-8, and the Assistant Superintendent. Given the thorough nature of the two-year review process, and given the diversity and size of the materials review committee, the unanimous vote was a strong endorsement of CMP3's strengths and its promise for students in the Lincoln Public Schools.

Originally developed by Michigan State University through a grant from the National Science Foundation, CMP3 features a problem-centered approach that will advance the district's teaching and learning in middle school math substantially. This approach requires students to engage in work that will extend not only their content knowledge in math, but also their ability to utilize the Eight Standards for Mathematical Practice.

In each grade, CMP3 includes a number of engaging units, each of which features three to five investigations that simulate real-life applications of mathematics. For a description of the CMP3 units, see here.

We invite all parents and guardians of Hanscom Middle School students in grades 5-7 to a CMP3 information session on Wednesday 5/31/17 from 8:30 – 9:30 a.m. at Hanscom Middle School. You will be able to review program materials, to learn about the program's structure and strengths, and to ask any questions you may have about CMP3.

### **Selection process**

The Math Materials Review Committee surveyed the national landscape and neighboring districts to identify programs that could be a match for Lincoln Public Schools students. The committee ultimately reviewed seven programs and scored each in a range of areas, including student engagement, alignment with standards, quality of lessons, assessments, differentiation, and technology. Two programs, <u>Big Ideas</u> and <u>Connected Mathematics Project 3</u> (CMP3), emerged from this review for further examination.

Members of the Committee visited districts that use these two programs to observe math classes and to speak with faculty about their experience with the materials. We then conducted a pilot using both programs in middle school classrooms this past winter.

At the end of January, the Committee reviewed feedback from students and faculty about their experience with the pilot. The Committee also held parent/guardian information sessions on both campuses to introduce the two programs to families. The unanimous vote of the Committee to recommend adoption of CMP3 took place in April, 2017.

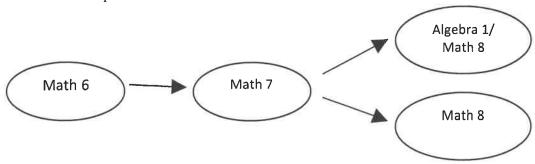
### Strengths of CMP3

- Level of rigor in Algebra 1: CMP3 not only meets all standards for a complete Algebra 1 course, it also requires a greater level of rigor than exists in the current Algebra 1 textbook. (Our thanks to Ellen Metzger, Content Specialist for Middle School Math, and Susan Totten, Gr. 8 Math Teacher, for their detailed comparison of CMP3 against existing program.)
- Emphasis on problem-solving: CMP3 requires students to engage more frequently with the <u>Standards for Mathematical Practice</u> through consistent exposure to multi-dimensional problems whose solutions are not immediately apparent and which require perseverance and the development of frustration tolerance.
- Meeting the needs of diverse learners: Michigan State University, which hosts the Connected Mathematics Project, has an excellent webpage with Frequently Asked Questions about CMP3 for families. Included on this webpage is a description of the opportunities that CMP provides for students, including those who are currently achieving at high levels in mathematics. The FAQ identifies those opportunities as follows:
  - nurturing higher-order thinking processes in open-ended investigations;
  - prompting students to communicate effectively;
  - having problem-solving as a major focus;
  - including mathematics problems that model real-life situations, and
  - encouraging experimentation and connections of mathematics to other subject areas.

We strongly encourage all parents in grades 5-7 to review the CMP3 FAOs for detailed information about the program.

### Structure of Gr. 6-8 math courses in Hanscom Middle School in 2017-18

The versatility of CMP3 allows for effective differentiation at all levels of achievement, which has exciting implications for how we group, support, and challenge our middle school students. See below for the 2017-18 middle school math courses in Hanscom Middle School; see <a href="here">here</a> for a narrative description of these courses.



Pathways between Hanscom Middle School and Bedford High School for math courses 6-12 Students progressing through CMP3 will be well-prepared for success in math courses at Bedford High School. For a full description of the options students have when making the transition from Lincoln School to BHS, along with the sequence of math courses in BHS from grades 9-12, please visit the high school's math department webpage here.

We are excited to share this news about our new middle school math program with you and look forward to further conversation at the parent and guardian information session at **Hanscom** Middle School on Wednesday, 5/31/17 at 8:30.

If you have any questions regarding the selection of CMP3 for our middle school math curriculum before then, please contact Ellen Metzger, Content Specialist for Middle School Math at <a href="mailto:emetzger@lincnet.org">emetzger@lincnet.org</a>, Erich Ledebuhr at <a href="mailto:ledebuhre@lincnet.org">ledebuhre@lincnet.org</a>, your child's math teacher, or me at pkinsella@lincnet.org.

Best,

Patricia Kinsella

Assistant Superintendent



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In each grade, CMP3 includes a number of engaging units, each of which features three to five investigations that simulate real-life applications of mathematics. For a description of the CMP3 units, see <a href="here">here</a>.

We invite all parents and guardians of Lincoln School students in grades 5-7 to a CMP3 information session Lincoln School on **Tuesday**, 5/16/17 at 8:00 a.m. in the Story Room. You will be able to review program materials, to learn about the program's structure and strengths, and to ask any questions you may have about CMP3.

### **Selection process**

The Math Materials Review Committee surveyed the national landscape and neighboring districts to identify programs that could be a match for Lincoln Public Schools students. The committee ultimately reviewed seven programs and scored each in a range of areas, including student engagement, alignment with standards, quality of lessons, assessments, differentiation, and technology. Two programs, <u>Big Ideas</u> and <u>Connected Mathematics Project 3</u> (CMP3), emerged from this review for further examination.

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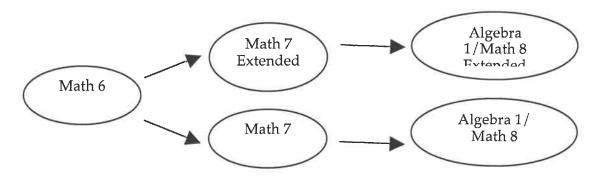
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We strongly encourage all parents in grades 5-7 to review the CMP3 FAOs for detailed information about the program.

### Structure of Gr. 6-8 math courses in Lincoln School in 2017-18

The versatility of CMP3 allows for effective differentiation at all levels of the achievement spectrum. Beginning in September 2017, therefore, students in Grade 6 in Lincoln School will participate in heterogeneous math classes. Students in Grades 7 and 8 will continue to study in leveled classes. See below for the 2017-18 middle school math courses in Lincoln School; see <a href="heterogeneous">here</a> for a narrative description of the courses.



### Pathways between Lincoln School and Lincoln-Sudbury for math courses 6-12

Students progressing through CMP3 will be well-prepared for success in math courses at L-S. The charts on the following pages illustrate both the options students have when making the transition from Lincoln School to L-S and the sequence of math courses in L-S from grades 9-12.

We are excited to share this news about our new middle school math program with you and look forward to further conversation at the parent and guardian information session on Tuesday, 5/16/17 at 8:00 in the Lincoln School Story Room.

If you have any questions regarding the selection of CMP3 for our middle school math curriculum before then, please contact Ellen Metzger, Content Specialist for Middle School Math at <a href="mailto:emetzger@lincnet.org">emetzger@lincnet.org</a>, Sharon Hobbs at <a href="mailto:shobbs@linenet.org">shobbs@linenet.org</a>, your child's math teacher, or me at <a href="mailto:pkinsella@lincnet.org">pkinsella@lincnet.org</a>.

Best,

Patricia Kinsella Assistant Superintendent

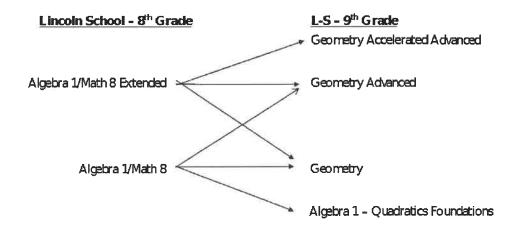


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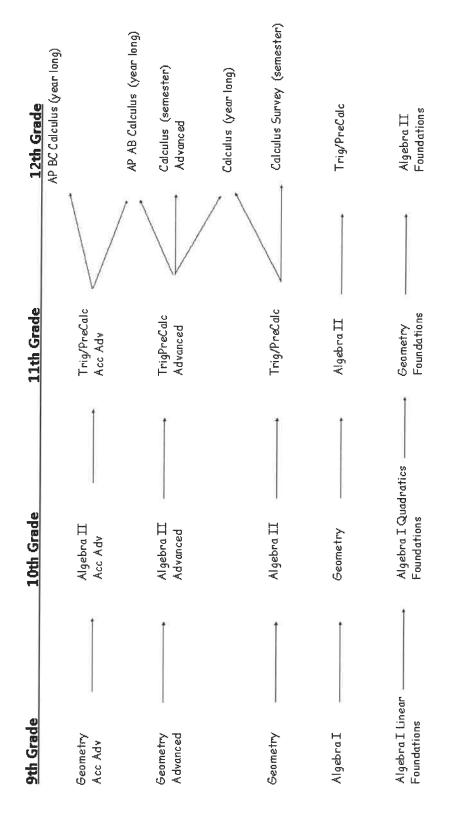
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# Sequence of math courses from Gr. 8 Lincoln School to Gr. 9 L-S, 2017-18



# Sequence of math courses at Lincoln-Sudbury Regional High School

Students progress each year by teacher recommendation.



AP Statistics may be taken as a 12<sup>th</sup> grade course by students who have taken Algebra II and/or Trig/PreCalc at the Advanced and Accelerated Advanced level. AP Statistics may be taken as a double-enroll course for Juniors and Seniors (as available).

Calculus, Statistics, Financial Literacy, Mathematical Problem-Solving through Puzzles and Games, Discrete Math. Semester Electives for 12<sup>th</sup> grade students - taken as a single math course or as a double enroll (as available):