

ASCEND
MATH
SUMMER
SCHOOL

RESOURCE

GUIDE



Summer school offers an exciting opportunity for remediation, enrichment, or extended-year for students in a fun and focused approach. In our experience, the fastest way to accelerate student learning, is to provide opportunities where students are challenged at their appropriate level — not too easy, not too difficult.

The primary objective for summer school is for students to gain knowledge that will improve their math conceptualization and understanding immediately and in the long term. The power of Ascend Math's adaptive and prescriptive plans will assist in accelerating learning while giving teachers the information to provide robust summer school learning opportunities. Summer school gives teachers an opportunity to address unfinished learning in a fun and flexible environment. Ascend Math offers a variety of solutions to accelerate learning during your summer school program.

Scheduling Considerations

Summer school programs range from 2 to 4 weeks – two to four hours per day with a variety of options in between. This equates to 20 to 80 hours of math during summer school. This dedicated time is an exciting opportunity to address unfinished learning. Planning for summer school does require a great deal of time; however, it will pay off if planned appropriately and leveraging interactive resources such as those found in Ascend Math saves time. Some schools choose to focus only on math and can dedicate 4 hours to math instruction. Other schools focus 2 hours on math and two hours on other subjects. Please see the sample schedules on the following page illustrating how to integrate large blocks of math while keeping students engaged.

Sample 4-hour schedule

Morning Math	20 minutes 8:00-8:20	Use Morning Math handout. Each student will spend the first 10 minutes of class working independently. (Teacher will predetermine a "Fraction of the Day" for each day.) Teacher will let students share their answers. As teacher and students discuss, teacher will watch for areas that students seem to be having difficulty.
Session 1	40 minutes 8:20-9:00	Ascend Math Program in Computer Lab (plus Flash Card Math)
Session 2	40 minutes 9:00-9:40	Whole Group Instruction using Ascend Math Program Ascend Lesson: Introduction to Exponents (1024)
Session 3	40 minutes 9:40-10:20	Ascend Math Program in Computer Lab (plus Flash Card Math)
Session 4	40 minutes 10:20-11:00	Activity: Target Dice Game Directions: 1. Put students into small groups of 3-4. Each student needs a Target Dice Recording sheet. At the beginning of each game, each player rolls one die. Whoever rolls the highest number is player one. 2. Player one picks a target number between 10 and 100. Everyone writes it on their recording sheet. 3. Player one rolls three dice. Everyone uses multiplication, addition, subtraction, and/or division to get as close to the target number as possible (or to get the target number). Write your problem and answer on your paper. 4. Everyone reveals their problems and answers. The person who comes closest to the target number gets five points. If you make the target number exactly, you get ten points. With ties, both players get the points. In the example, the target is 13. 5. Player two then rolls the dice and play continues.
Session 5	40 minutes 11:00-11:40	Ascend Math Program in Computer Lab (plus Flash Card Math)
EXIT TICKET	20 minutes 11:40-12:00	On the board, write: $5^2=$ $4^3=$ $2^4=$ $6^2=$ Have students write their answers on their EXIT TICKETS.

Session 1	30 minutes	Ascend Math Program in Computer Lab (plus Flash Card Math)
Session 2	30 minutes	Whole Group Instruction using Ascend Math Program Ascend Lesson: Similar Triangles and Applications (5243)
Session 3	20 minutes	Activity: OUTDOOR ANGLE TREASURE HUNT Explain to students that we are going on an outdoor treasure hunt for ANGLES! Do a quick review to ensure that they know the difference between angle types: right (90 degrees), obtuse (>90 degrees), and acute (<90 degrees). Look for some examples around the classroom: corner of the desk (right angle), space between your fingers (acute angle), clock hands at 10:30 (obtuse angle). Take the students outside. Each student will need pencil and paper. Students may work in pairs. Instruct students to look for as many right, obtuse, and acute angles as they can. Point out some examples to get them started. For example, a window or door frame may make a right angle. Playground equipment could make an acute or obtuse angle. Encourage creativity. Show them how people can make angles too...between their arms and legs! <input type="checkbox"/> When the hunt is finished, have students categorize their angles and compare with other groups.
Session 4	40 minutes	Ascend Math Program in Computer Lab (plus Flash Card Math)

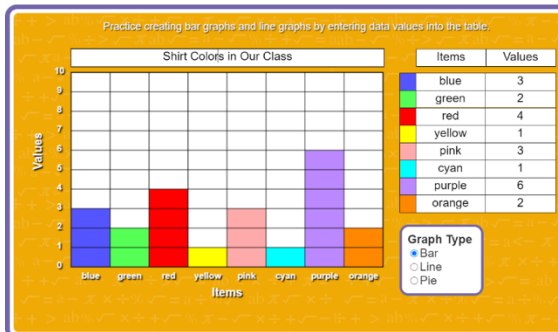
Sample
2-hour day

High Priority Standards

The second challenge that summer school coordinators face is how to focus on standards in the short instructional window.

Ascend Math allows schools to customize study plans for summer school by omitting standards that are outside the scope of summer school.

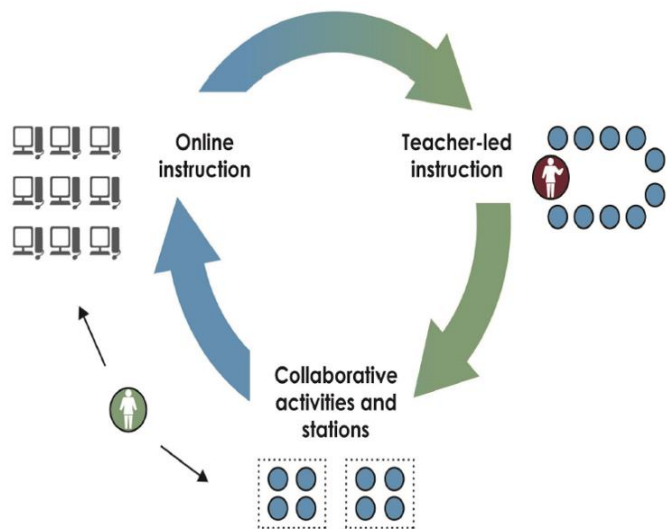
Ascend Math Compass and Teacher Guides provide a plethora of standards aligned material for teachers to utilize to prepare for lessons. Lesson guides give teachers guiding questions for the Ascend Math virtual manipulatives as well as prompts to discuss vocabulary. The teacher guides also provide suggestions for project-based learning activities. The Ascend Math team is available to consult with districts to provide daily plans for standards-based learning.



Group Instruction Options/Active Participation

Station Rotation Model

Some schools choose to use a station rotation model. Teachers



have the option to teach Priority Standards or focus on unfinished learning during teacher-led instruction using Ascend Compass, Teacher Guides and the Live Student Tracker. During the online instruction portion, students can work on individualized instructional plans or customized study plans objectives. For the third rotation teachers can use the Ascend Compass Guides to plan collaborative, hands-on learning experiences.



“Pull-Out” Instruction:
10-15 minutes of teacher led instruction for intervention or reteaching of objectives or Priority Standard. Use Compass guides for lesson supports.



Independent Work:

- Ascend Math Program
- Study Guide practice problems as checks for understanding
- Quizzes

Ascend Math easily lends itself to implementing small group instruction while supporting students in multiple settings and with a variety of subject matter that may need remediation. For a classroom only doing math during summer school, teachers can follow the above diagram recommendations for each instructional setting. If teachers are intergrading multiple subjects, students could work on Ascend Math and be pulled for reading groups, math reinforcement or other subject work. Consult with your Ascend Math representative to explore individualized classroom needs.

Goal Setting and Motivation

Our best implementations are those that set clear expectations. Administrators, teachers, and students need to all be aware of the desired usage starting day 1. When students work on the Ascend Math program for 10 hours during summer school, we have seen incredible growth.

Encouraging a safe place for students to build community can increase overall motivation to engage in class and complete work especially during summer school. Establishing motivational techniques that are easy to implement and increase desired behavior can be a challenge in such a short period of time. In any setting, educators can focus on setting goals and intrinsic motivation along with extrinsic motivation of tangible rewards. For example, when students and educators agree and have clear concise expectations then students have control of their learning, motivation increases.

Choosing rewards that are easy to implement, not costly and of high value make using a reward system easier and increases its longevity. Many community businesses will support education such as local restaurants, amusement parks and convenience stores. Other free or low-cost reward ideas are:

Extra points or homework passes for completed intervention work.

Allow students to pick a song to start class or share a video they made.

Positive note home- This can be a welcomed surprise!

Furthermore, have whole class and individual rewards- whole class can be if 90% of class finishes 2 lessons in a week there is extra chat time or no weekend homework. The 90% goal allows for success while building community.

Administer Screener Early

Ascend Math establishes students' math levels by starting with a screener assessment. If possible, Ascend Math recommends administering the Screener a few weeks before school ends to all students who are new to Ascend Math. The most accurate data may be found, given students are still in "school-mode" and it allows for the Summer School Director to have a plan given the math level of each student. Furthermore, it does not waste a precious summer school day and study guides can be preprinted, so student can hit the ground running on Day 1.

Opportunities for Family Engagement

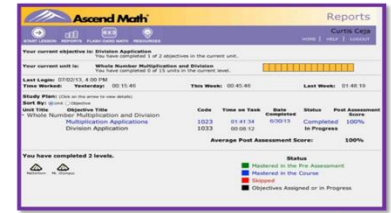
Some states stipulate that summer school programs have Opportunities for Family Engagement. Even if your school does not, encouraging family involvement can increase students' meaningful participation. Ascend Math provides educators with a Parent Handbook to share with guardians which includes an overview of the program, resources for motivation and how to monitor progress at home. Family support can be as simple as placing a growth chart on the refrigerator! Caregivers can help increase engagement by watching videos with students as Ascend Math is accessible wherever there is WIFI. Students can share their work and progress with parents. For increased STEM activities, students and families can create Jamboards and create videos to explain their completion of virtual manipulatives.

Objective Title	Code	Time on Task	Date Completed	Status	Post Assessment Score
Adding and Subtracting Fractions with Unlike Denominators	2082	00:06:18	10/13/21	Completed	100
Distributive Property	7321	00:03:27	10/14/21	Completed	80
Order of Operations with Signed Numbers	7301	00:13:23	10/25/21	Completed	60
Calculating Percents of a Whole Number	4162	00:00:00		Assigned	0
Calculating Percents of a Whole Number	4162	00:01:00	11/15/21	Completed	60

Tracking Progress

Ascend Math supports self-reflection and motivation by allowing students to easily track and see progress from the student login. Teachers can support social and emotional learning through goal setting with students.

Ascend Math makes the tracking quick and easy for teachers through targeted reports such as the Activity Completion Report. Ascend Math recommends checking the Activity Completion report daily as summer school is such a short time frame. Teachers can use these reports to create growth bulletin boards or [virtual bulletin boards](#).



Activity Completion Report

Teacher	Cox, Harold
Class	8thGradeMath
Time Frame	Last 30 Days
Start Date	06/03/2013
End Date	06/10/2013
Report Date	6/11/2013 14:16

Name	Actual Grade	Level	Objectives Completed on Pre Assessment	Objectives Completed on Post Assessment	Total Hours Worked	Last Login Date
Garcia, Ryan	8	7	4	2	02:07:26	06/03/2013
Holloway, Brett	8	4	4	6	01:39:27	06/03/2013
Davis, Derek	8	4	7	6	02:10:19	06/03/2013
Willis, Annette	8	3	4	6	01:50:20	06/03/2013
Flores, Ignacio	8	5	3	3	01:31:12	06/04/2013

Planning

The Ascend Math team is ready to assist with focusing on planning and implementation of your Summer School program starting with:

Designing classroom implementation model and expectations.

Establishing the use of Priority Standards or Individualized Learning Plans

Using Ascend Math Compass Teaching Guides to plan lessons

For an even more customized program including your specific summer school priority standards or detailed, daily Ascend Math whole day lessons, please consult with your Ascend Math representative or contact info@ascendmath.com.

Download this Guide by selecting the QR code or visiting the link below.

<https://ascendmath.com/summer-school/>



