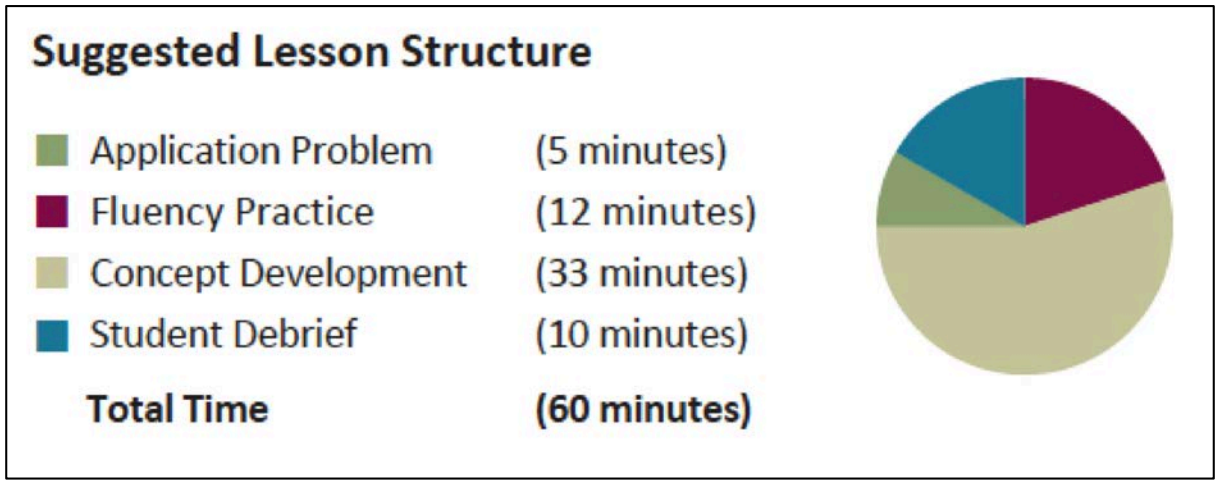
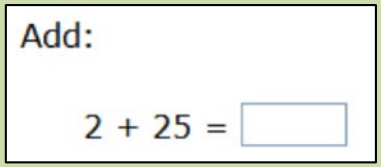
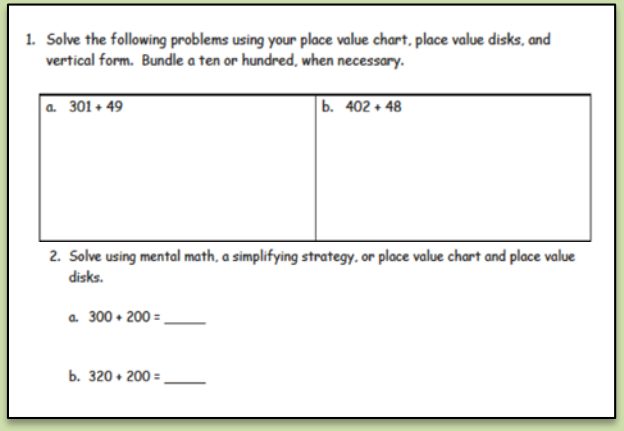
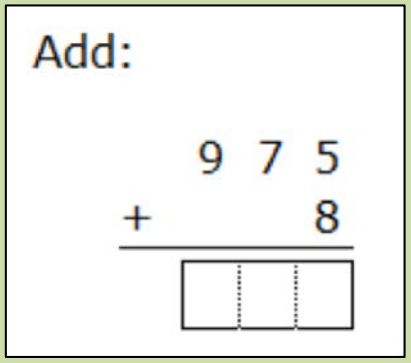
IXL and EngageNY Lesson Alignment

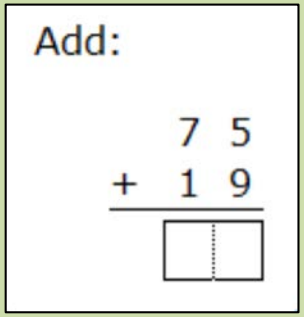
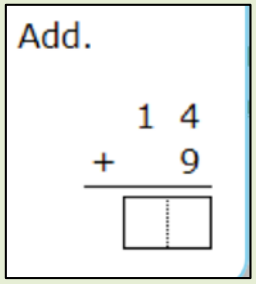
Grade 2: Module 5, Topic B, Lesson 8
Objective: Relate manipulative representations to the addition algorithm.
Standards: 2.NBT.7, 2.NBT.9 *Links from G1-M6 to G3-M2*

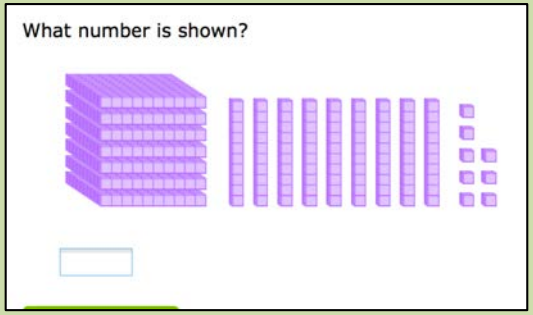
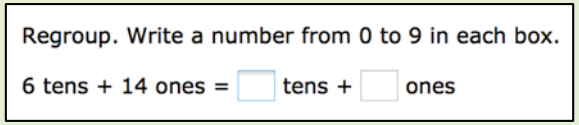
Topic Summary: In Topic B, students build on the work from Topic A by linking both concrete and pictorial representations of the vertical algorithm for addition of three-digit numbers in which they must employ regrouping, both with the models and the procedure. This lesson also builds on work in Module 4 in which students composed tens to solve addition of two-digit numbers.

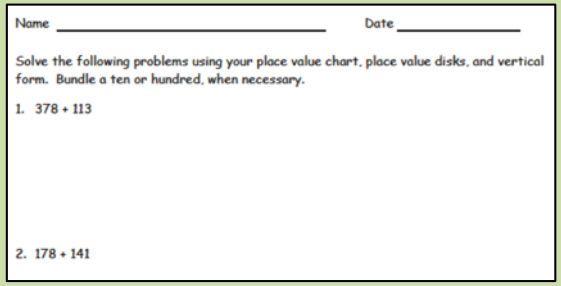
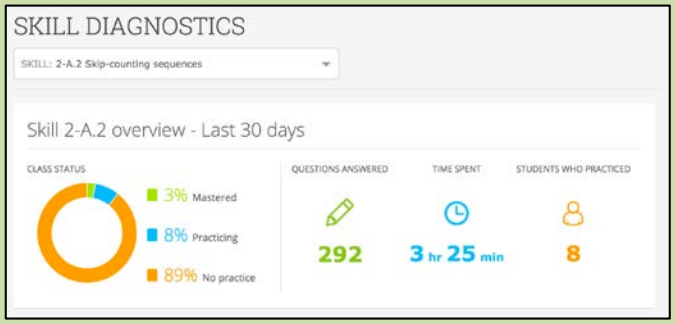
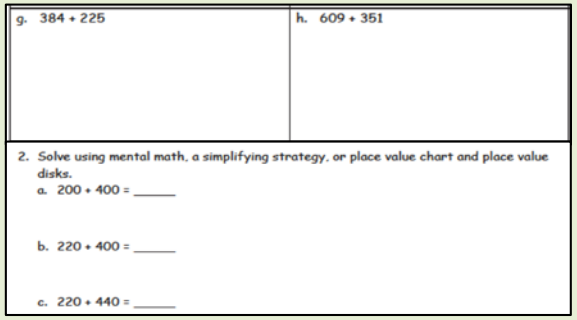
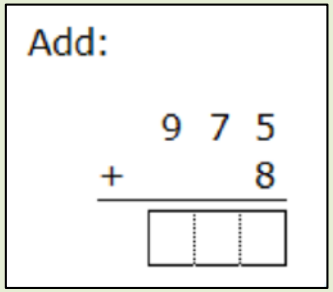
Lesson Summary: Students use their understanding of ten as a unit to regroup either tens or ones to add two three-digit numbers using the standard algorithm.

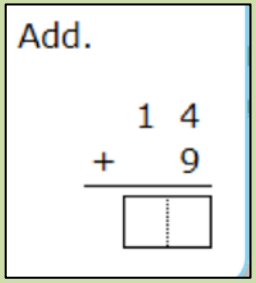


EngageNY Content	IXL Skills
Fluency *(12 min)* Teacher selects 1 or more of the following suggested fluency drills. *(3 min)* Add Common Units: This is one sequence done on personal white boards. *(9 min)* Sprint: Two-Digit Addition (2-digit plus 1-digit)	This skill can provide additional fluency support for students who struggle with the Sprint. Grade 2 G.2: Add a two-digit and a one-digit number - without regrouping 
Application Problem *(10 min)*	N/A
Problem Set *(10 min)*  NOTE: The problem set is a component of the Concept Development time.	This skill can support the problem set. Grade 2 I.2: Addition with three-digit numbers 

EngageNY Remediation Suggestions and IXL Alternatives		
Anticipated Difficulty	**"Must Do" Remedial Problem Suggestion**	**IXL Alternative**
The first problem of the problem set is too challenging. "Zero Problems"	Write a short sequence of problems on the board that provides a ladder to problem 1. Direct the class or small group to complete those first problems to empower them to begin the problem set.	Grade 2 G.5: Add two two-digit numbers - with regrouping 
Students lack fluency or foundational skills necessary for the lesson. "Thrilling Drill" or "Sprint"	Before beginning the problem set, do a quick, engaging fluency exercise, such as a Rapid White Board Exchange. Create your own fluency sequence or locate an appropriate Sprint.	Grade 1 B.29: Add a one-digit number to a two-digit number - with regrouping 

EngageNY Remediation Suggestions and IXL Alternatives		
Anticipated Difficulty	**"Must Do" Remedial Problem Suggestion**	**IXL Alternative**
More work is needed at a concrete or pictorial level.	Provide manipulatives or the opportunity to draw solution strategies.	Grade 2 M.2: Place value models - up to hundreds 
More work is needed at the abstract level.	Hone the problem set to reduce the amount of drawing as appropriate for certain students or the whole class.	Grade 2 M.7: Regrouping tens and ones I 

EngageNY Content	IXL Skills
Student Debrief *(10 min, includes 3 min for exit ticket)*  Name _____ Date _____ Solve the following problems using your place value chart, place value disks, and vertical form. Bundle a ten or hundred, when necessary. 1. 378 + 113 2. 178 + 141	Use IXL Analytics to see how students are doing and if any are struggling.  SKILL DIAGNOSTICS SKILL: 2-A.2 Skip-counting sequences Skill 2-A.2 overview - Last 30 days CLASS STATUS 3% Mastered 8% Practicing 89% No practice QUESTIONS ANSWERED 292 TIME SPENT 3 hr 25 min STUDENTS WHO PRACTICED 8
Homework  g. 384 + 225 h. 609 + 351 2. Solve using mental math, a simplifying strategy, or place value chart and place value disks. a. 200 + 400 = _____ b. 220 + 400 = _____ c. 220 + 440 = _____	NOTE: The problem types for homework match those found in the problem set. Therefore, the IXL skills selected to support the problem set could also be assigned as homework. Grade 2 I.2: Addition with three-digit numbers  Add: 9 7 5 + 8

EngageNY Content	IXL Skills
Remediation Homework	Grade 1 B.29: Add a one-digit number to a two-digit number - with regrouping 
Extension Suggestion	Grade 2 I.3: Addition input/output tables - up to three digits