

Lesson Printables

Be a rockstar and only print what you need!



Planners: Page 2-3

Activity

Sunlight: 4
Twilight: 5
Midnight: 6

Extras

Sunlight Recording Log: 7
Recording Log: 8

Answers

Sunlight: 9
Twilight: 10
Midnight: 11

**Printing in the US? Scale to 'fit to printable area' in order to get the best print.*

LESSON 1: Place Value - identifying and creating numbers

Starter	Main Activity/Input: Using place value blocks to draw or represent a number.	Plenary
<p>On Target: Can students use the numbers provided to make the target number 10?</p> <p>To support:</p> <ol style="list-style-type: none">1. What are some ways students can make 10 using addition? (Students could repeat numbers)2. Students could use a number more than once. <p>To challenge:</p> <ol style="list-style-type: none">1. Challenge students to only use each number once within a number sentence.2. Ask students how many different ways they can make the target number.	<p>Input:</p> <ol style="list-style-type: none">1. Slide 6 asks students what they already know about the term place value or what they know about our number system. Give students time to discuss and share ideas on the board. This could be used as a pre-assessment to see what students already know. E.g. Do they know the name of different place value columns?2. Slide 7 shows 3 different types of place value blocks. If you have these in class, allow students to use them. Ask: What would you call these blocks? Do you notice any connections between them? Slide 8 names the blocks. Note, we are using the terms hundreds, tens and ones. Your school might use units instead of ones. Also note, at this point, we do not explicitly go into the connection that there are 10 ones in 1 ten and 10 tens in 1 hundred. If your students inquire into this, it might be worth taking time to talk about the connection. We will explicitly explore it at a later date.3. Slide 9 shows a place value block representation of a number. What could the number be? Have students share their thinking on the board or on their whiteboards. As a class, model counting the hundreds, tens and ones and writing the amounts below the blocks as seen on slide 10.4. Slide 11 provides students with a new number and asks them to draw it. Use squares for hundreds, lines/sticks for tens and dots for ones. Slide 12 reveals what the number would look like using place value blocks. You could also have students physically build the number if you have place value blocks in the classroom.5. Slide 12 asks students if the number 148 is odd or even. Have students share their thinking on how to determine this. Slide 13 models dividing the 8 ones into two equal groups. This means it is an even number. You could repeat this by calling out numbers of your own for students to explore.6. Slide 14 reinforces students' understanding of odd and even by asking students to write or draw a 3-digit odd number. One possible solution can be found on slide 15. <p>Activity: Read and draw numbers.</p> <ol style="list-style-type: none">1. Print the challenge cards for students to share or stick in their books. If the challenge card is a picture model of a number, students should write the number down. If the challenge card is a number, they should draw the number using place value pictures or build it with place value blocks.2. If you have place value blocks, you could build number stations for students to move between rather than printed cards. E.g. On one desk, have a pile of PV blocks. Students would need to count them in order to work out what the number is. Repeat for another desk. <p>To support:</p> <ol style="list-style-type: none">1. Sunlight Zone uses 2-digit numbers and 3-digit numbers.2. Print the place value charts for students to record their findings. See printables. <p>To challenge:</p> <ol style="list-style-type: none">1. Encourage students to identify if numbers are odd or even and then write their numbers in order from largest to smallest.	<p>How Big?</p> <p>What is the biggest number students can make or draw? What are 3 things they know about it?</p> <p>Check for understanding:</p> <ol style="list-style-type: none">1. Can students make a number and then identify anything about it? E.g. 35 has 3 tens. It is odd, etc.

Things that might be useful for this lesson:

- Individual whiteboards:
 - Help students to record their thinking and share ideas with others .
- Place value blocks:
 - Help model the names of place value columns/spots.
 - Can be used to create numbers.
 - Help to show sharing between two groups in order to identify odd and even numbers.



Peek at the Printables:

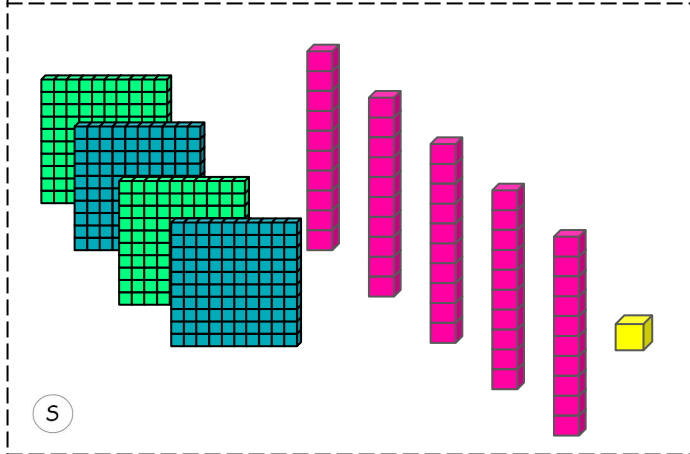
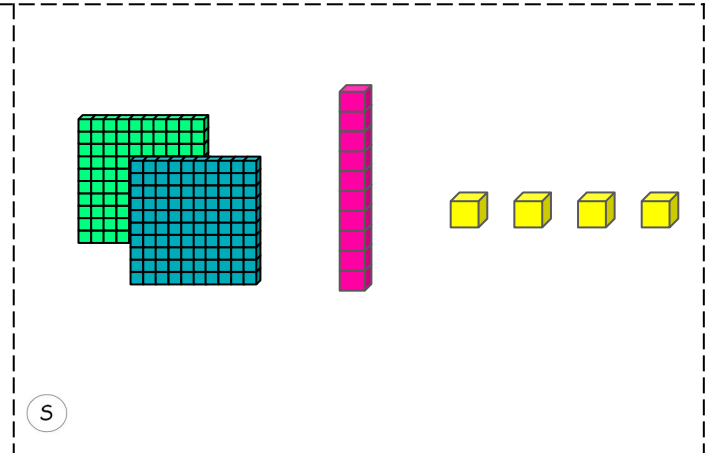
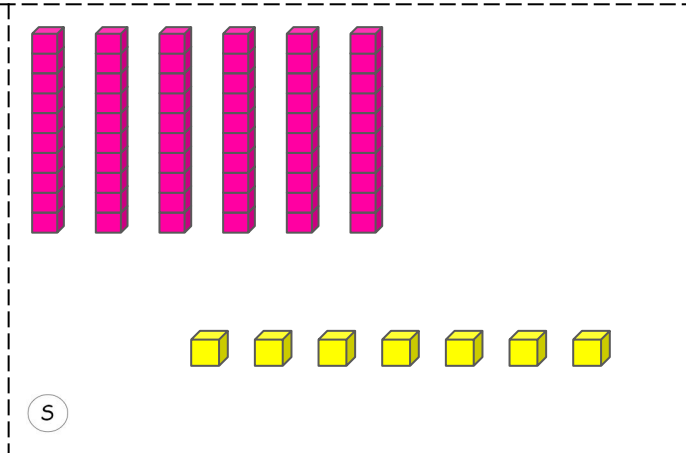
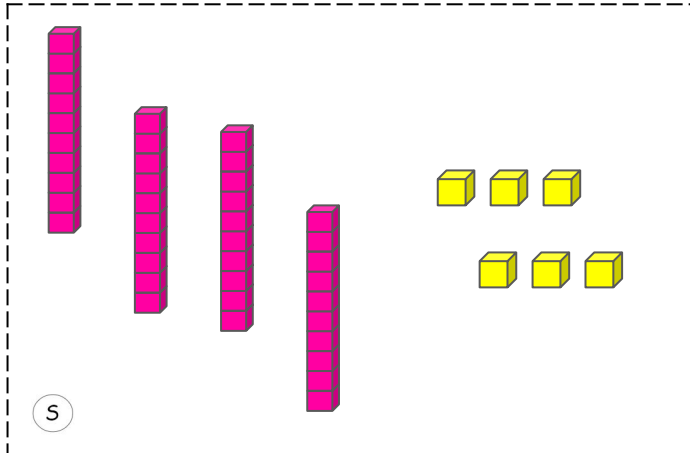
Sunlight Zone			Twilight Zone			Midnight Zone							
	65	78		465	197		416	627					
	409	756	197		608	723	204		1,602		2,153		3,204



Greener Alternatives:

- Write/draw numbers on whiteboards and place them around the classroom to form stations.
- Create place value block piles. Students can move between the white boards and place value block stations.

Sunlight Numbers



65

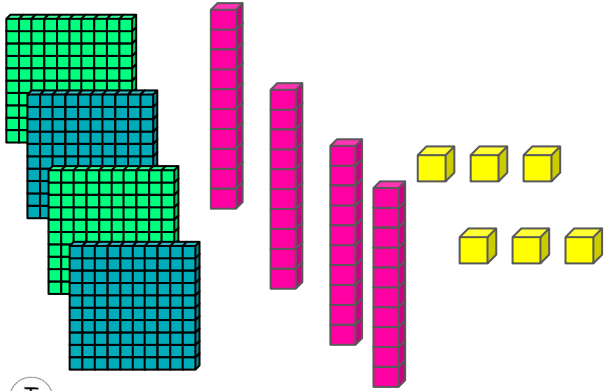
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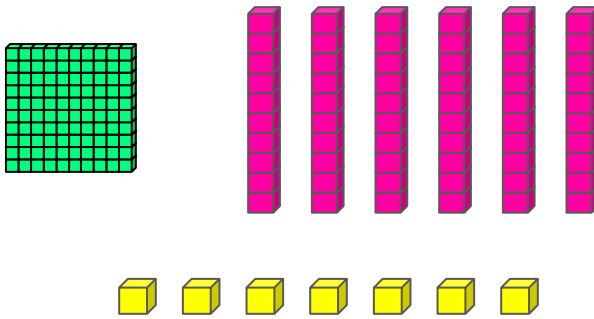
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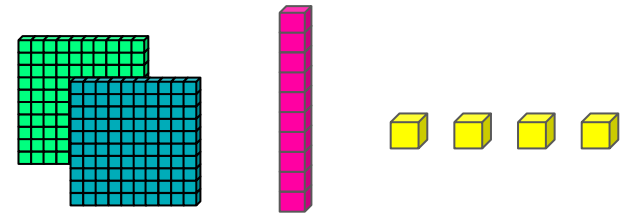
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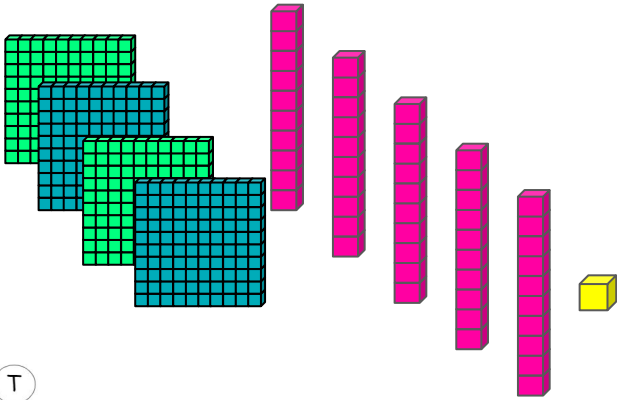
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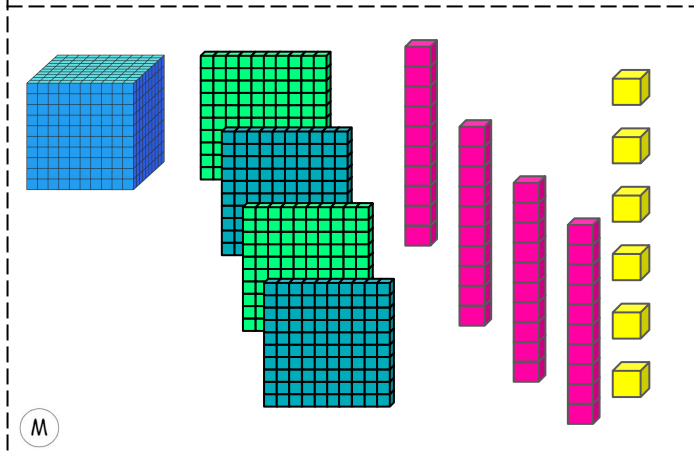
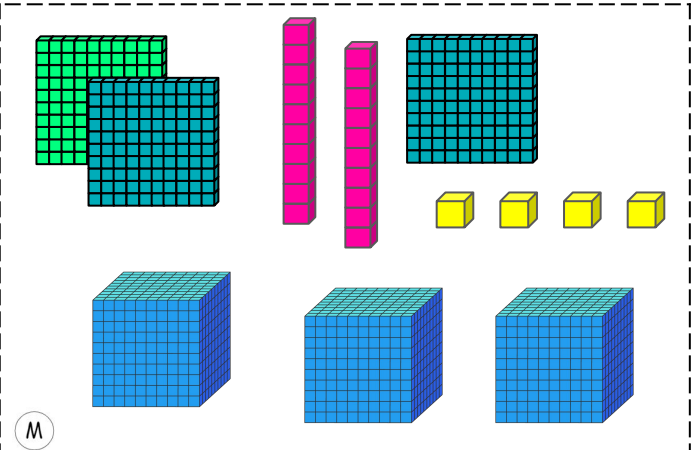
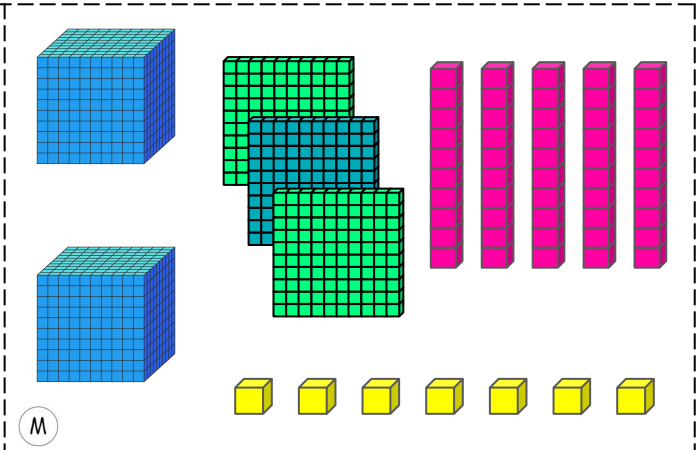
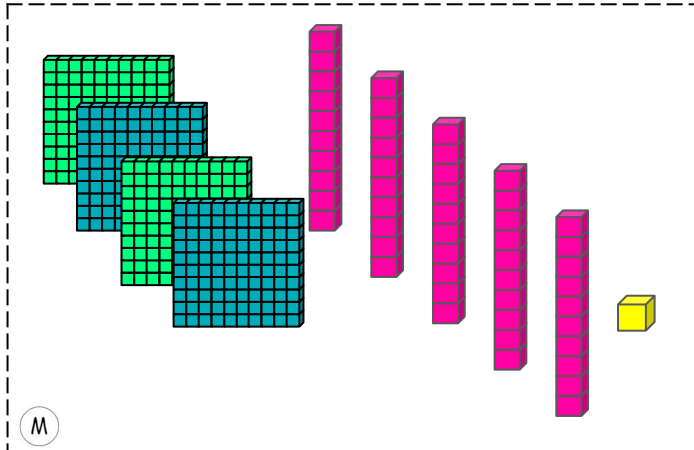
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Midnight Numbers



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1,602

2,153

3,204

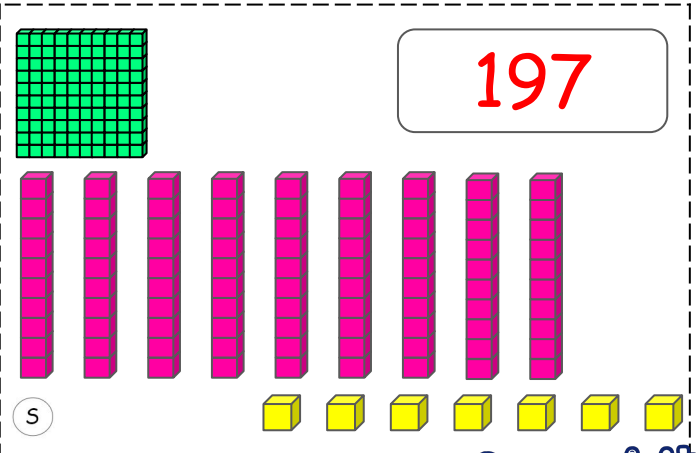
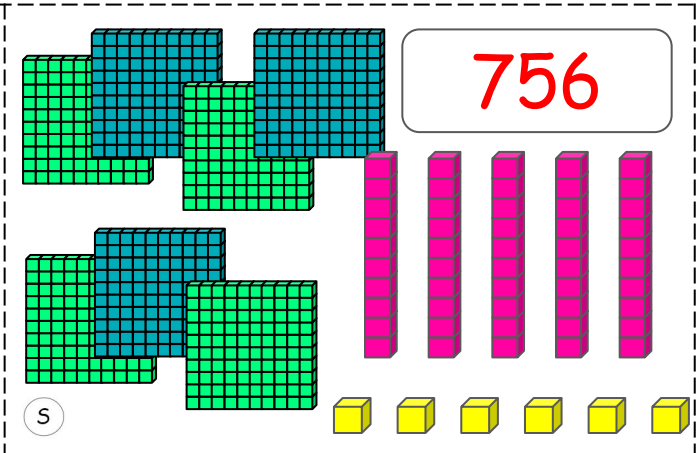
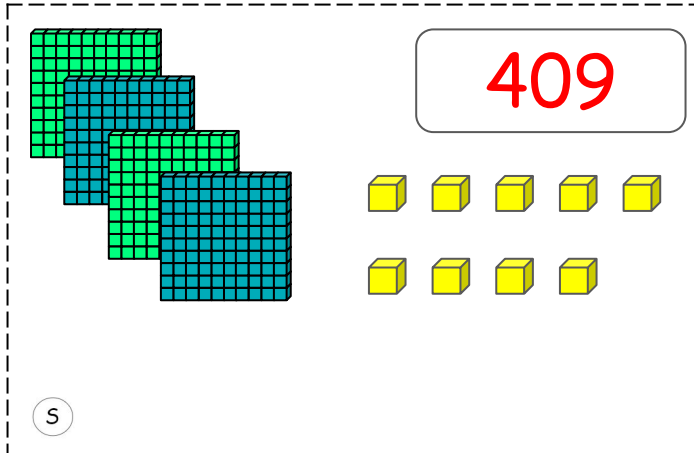
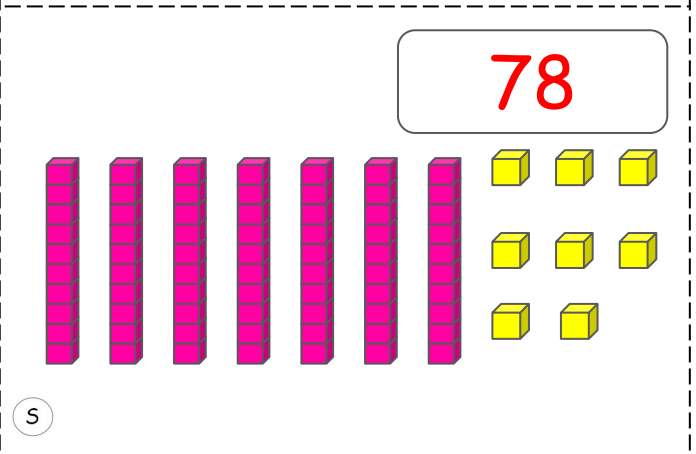
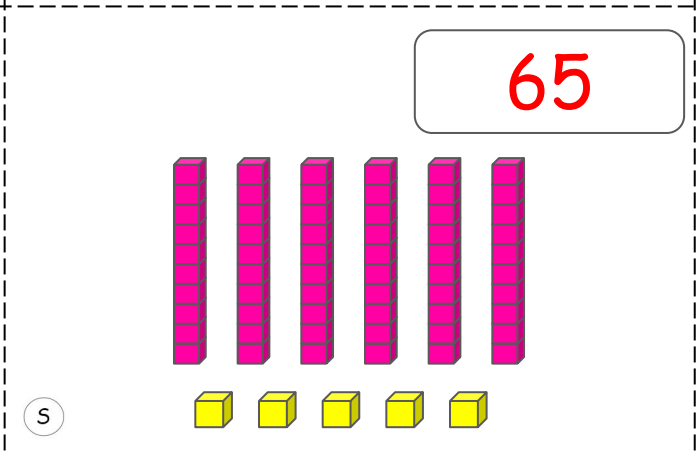
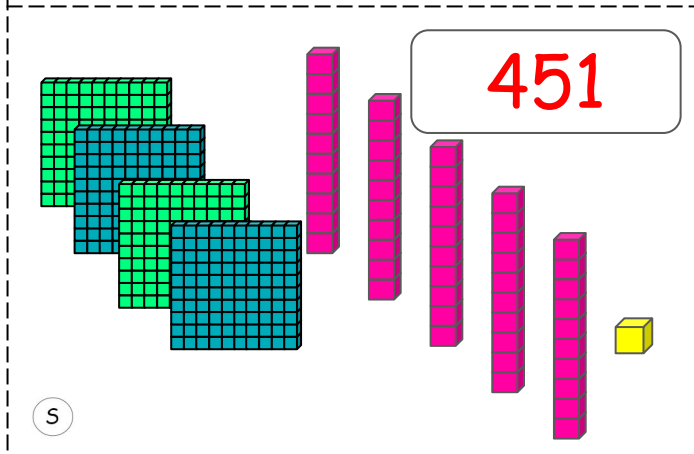
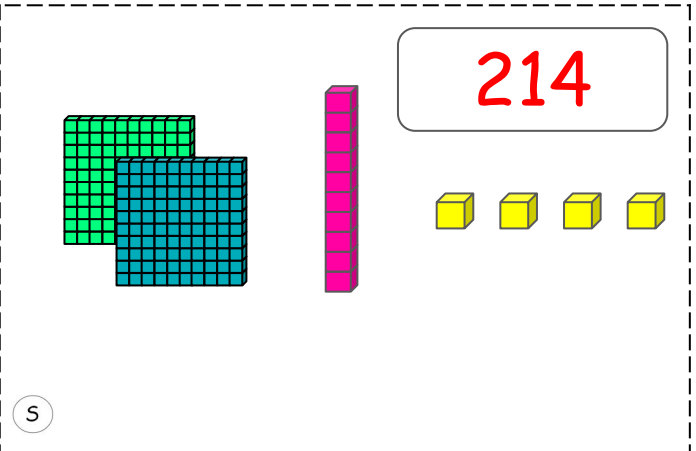
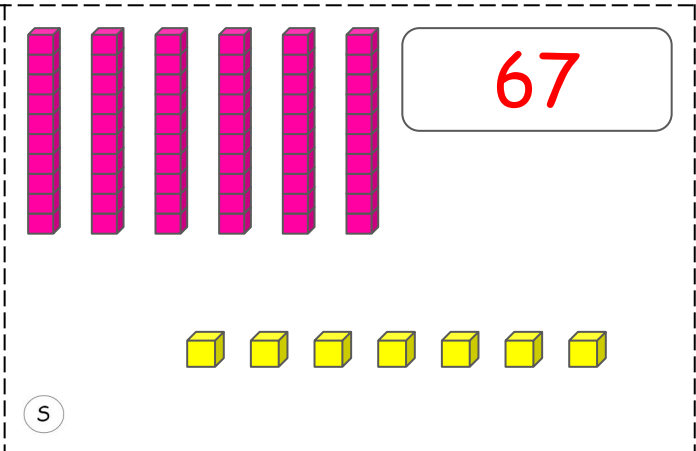
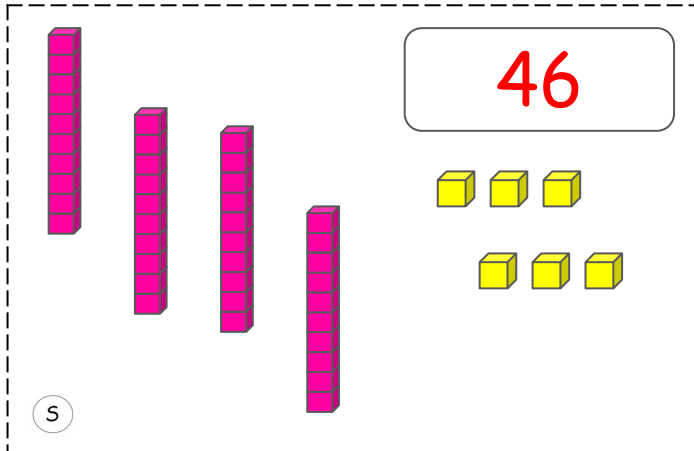
Recording Log

Number			Picture						
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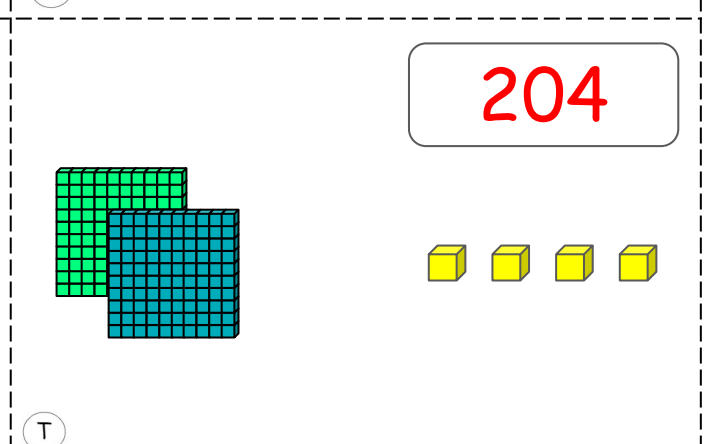
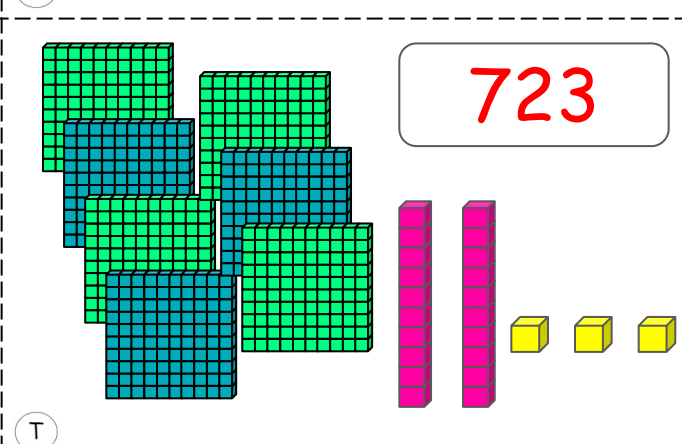
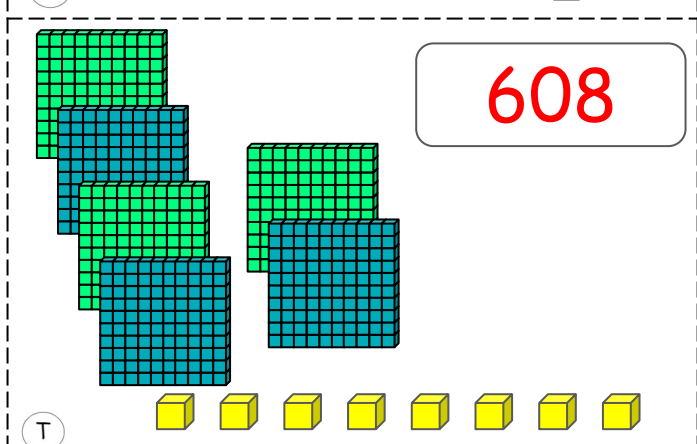
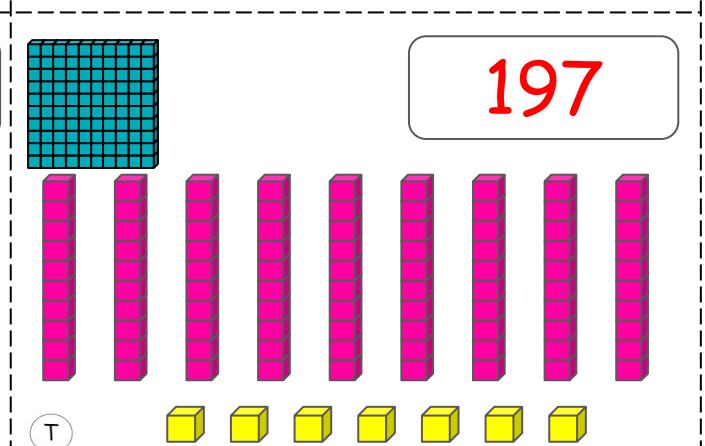
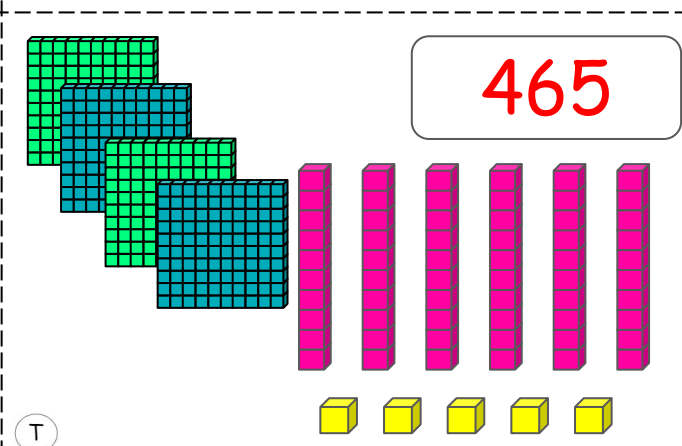
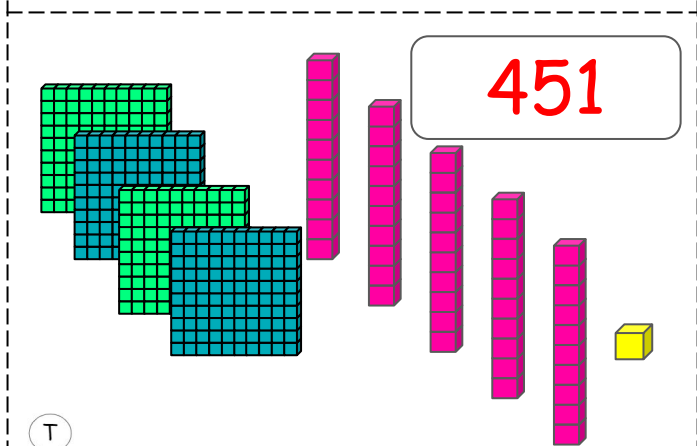
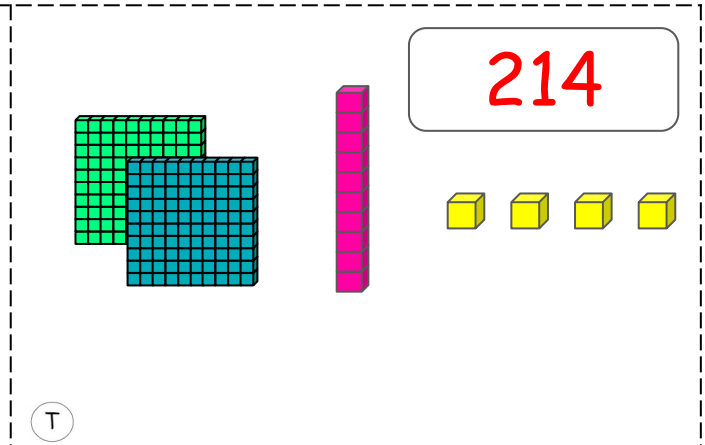
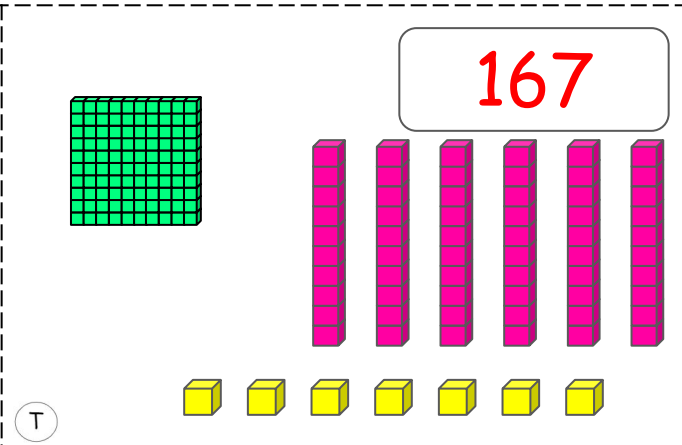
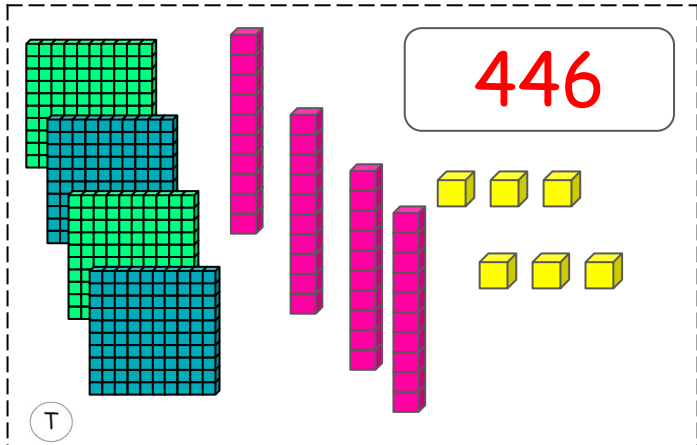
Recording Log

Number	Picture	Odd or Even?

Sunlight Answers



Twilight Answers



Midnight Answers

