Essential Skill (What does the student need to know before doing this lesson? Students should have a good grasp of basic skills using factors, sums, and the mathematical operations of addition, subtraction, multiplication, and division.)

<table>
<thead>
<tr>
<th>Bloom’s Taxonomy Revised</th>
<th>Verbs for Objectives</th>
<th>Objectives</th>
<th>Instructional Activities</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>x</em> Remembering</td>
<td>(Power Words)</td>
<td>1.05 Develop fluency in the use of factors, multiples, exponential notation, and prime factorization.</td>
<td>1. 5- Minute Check 1-2 from the interactive chalkboard.</td>
<td><em>x</em> Teacher observation</td>
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<tr>
<td><em>x</em> Understanding</td>
<td>__Analyze (An)</td>
<td></td>
<td>2. Communication: Discuss the nonmathematical meanings of the words factor, prime, and composite. Prime can mean first or original. Composite means made up of different components or factors. Factor is related to the Latin word for “to make” and can mean one thing influences or contributes to another, as in “sun exposure is a factor in the aging process.” So, a factor acts on a prime (original) number to form a composite number. A factor is also a component of a composite number.</td>
<td><em>x</em> Written Assessment</td>
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<td><em>x</em> Applying</td>
<td>__Classify (E)</td>
<td></td>
<td>3. Complete lesson 1-3 on the interactive chalkboard.</td>
<td><em>x</em> Essential Question</td>
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<tr>
<td><em>x</em> Analysing</td>
<td>__Compare (An)</td>
<td></td>
<td>4. Begin the Alice Program – Prime And Composite Numbers.</td>
<td><em>x</em> Pre/Post Assessment</td>
</tr>
<tr>
<td><em>x</em> Evaluating</td>
<td>__Contrast (An)</td>
<td></td>
<td></td>
<td><em>x</em> Oral Response</td>
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<tr>
<td><em>x</em> Creating</td>
<td>__Create (E)</td>
<td></td>
<td></td>
<td><em>x</em> Exit Slip</td>
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<td></td>
<td>__Define (K)</td>
<td></td>
<td></td>
<td>__Journal Entry</td>
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<td></td>
<td>__Describe (K)</td>
<td></td>
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<td>__Pictorial Representation</td>
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<td></td>
<td>__Design (S)</td>
<td></td>
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<td><em>x</em> Product</td>
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<td></td>
<td>__Develop (An, S)</td>
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<td><em>x</em> Student Discussion</td>
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<td></td>
<td>__Evaluate (E)</td>
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<td>__Other ( )</td>
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<td>Reading Strategies</td>
<td>__Formulate (S)</td>
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<td></td>
<td>__Identify (K)</td>
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<td></td>
<td>__Infer (C)</td>
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<td></td>
<td>__Justify (E)</td>
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<td></td>
<td>__List (K)</td>
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<tr>
<td></td>
<td>__Solve (AP)</td>
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<td></td>
<td>__Summarize (C)</td>
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<td></td>
<td>__Support (E)</td>
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<td>__Predict (C)</td>
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<td></td>
<td>__Use (Ap)</td>
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**Essential Questions**

How are prime and composite numbers used in the 21st Century community?

**Closure**

Have the learners unpack the definition of Prime and Composite in their journals. They are to give an example of each as well explain why they cannot be both prime and composite at the same time. Ask the students to classify “one” as either prime or composite (of course it’s neither). Ask them to explain the concept of Prime Factorization (they must follow this with an example).
5. Allow the learners to work through the Alice Program.

<table>
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<tr>
<th>Materials needed</th>
<th>Key Vocabulary</th>
<th>Homework</th>
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</table>
| Alice Interface, Student Workbook (1-3), Study Guide and Intervention, p. 11 Reading to Learn Mathematics, p. 14 5-Minute check over lesson 1-2 | • Factor  
• Prime Number  
• Composite Number  
• Prime Factorization | Complete Problems 52 and 54 (Critical Thinking) on page 17. Please show your work and explain how you came up with your answers. |

Higher Order Questions:
1. Certain numbers have an odd number of factors, what do these numbers share in common? (inference)
2. What generalization can you make from this information? (inference)
3. How well are your conclusions supported by the facts? Explain.

Differentiation: Auditory/Musical: Have students form an “audible factor tree.” Call out a number. Then have students come up two at a time and call two factors, branching out until all of the prime factors have been found. For example, call out “56.” Two students will form the first two branches and call out “8” and “7,”. Two more students will form branches from the 8 and call out “2” and “4”. Finally, two students will stand in front of the 4 and call out “2” and “2”.

Reflection: What do I want my students to be able to do after this lesson? They should be able to identify if a number is prime or composite and they should be able to find the prime factorization of a composite number.