

Hopscotch Lesson Plan

Lesson Segment Focus: Basic Algebra

Lesson 1 of 1

Course & topic addressed: Math & Basic Algebra

Date: 11/5/18

Grade: 3

Student Outcomes

Specific learning objectives for this lesson.	The specific learning objective for this lesson is for students to show knowledge in how to code along with the basic algebraic functions of math.
Describe the connection to previous lessons. (Prior knowledge of students this builds upon)	The connection to previous lessons that this lesson builds upon is basic mathematical knowledge of how to add, subtract, multiply, and divide whole numbers. Before students enter the third grade they should understand each basic mathematical symbol in order to complete this assignment.
Knowledge of students' background (personal, cultural, or community assets)	The knowledge of students' background in terms of personal assets is having prior knowledge of how to code from playing games at home or being advanced in terms of their math skills. I would put students in groups in terms of level of ability and put one advanced student in each group.

State Academic Content Standards

List the state academic content standards with which this lesson is aligned. Include state abbreviation and number & text of the standard.	Operations and Algebraic Thinking: Solve problems involving the four operations and identify and explain patterns in arithmetic.
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Academic Language Support

<p>What planned instructional supports might you use to assist students to understand key academic language to express and develop their content learning?</p> <p>What will you do to provide varying supports for students at different levels of academic language development?</p>	<p>The planned instructional supports that I might use to assist students to understand key academic language to express and develop their content learning is flashcards. I would have a math symbol on one side of the flashcard and then the name for that symbol on the other side. To provide varying supports for students at different levels of academic language development I would individually help them sound out words if they are struggling.</p>
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Key Vocabulary

What vocabulary terms/content specific terminology must be addressed for students to master the lesson?	Addition, subtraction, multiplication, and division
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Materials

Materials needed by teacher for this lesson.	The materials needed by the teacher for this lesson is an iPad, the Hopscotch coding app, and basic mathematical computations that involve the four basic algebraic functions for students to solve.
Materials needed by students for this lesson.	The materials needed by the students for this lesson is an iPad, the Hopscotch coding app, and the list of math problems that the teacher has provided.

Lesson Timeline with Instructional Strategies & Learning Tasks (This should be VERY DETAILED)

Amount of Time	Teaching & Learning Activities	Describe what YOU (teacher) will be doing and/or what STUDENTS will be doing during this part of the lesson.
5 minutes	Introduction: To introduce this lesson I will ask my students if any of them know how to code.	I will ask the introduction question and then students will raise their hand in order to answer the question. I will then call on students that want to add to the discussion about their background knowledge in coding.
30 minutes	Instruction: For the bulk of the lesson I will be teaching students about coding and how they can make their own game using mathematics.	I will teach the students about the basics of coding and what they need to know in order to make their own game. Using the app Hopscotch there are several tutorial videos that I will have my students watch in order to make it easier for them to understand. The students can also play with games that other students have created as well and get a sneak peek at what they will be doing. For the assignment that I will have students create I will ask them to make a game that involves the four basic functions of math. They could code a matching game or even a multiple-choice game. With the help of the Hopscotch app they will be able to do it almost completely on their own. I will give my students the list of problems that I want them to include just to make sure they don't leave one out. I will also use this as a type of informal assessment to see if they get the answers right on each other's games.
5 minutes	Closure: To close the lesson I will ask my students what they thought about the activity.	I will ask my students the question and they will raise their hand if they have anything they want to contribute to the discussion. After students have answered this question, then I will ask them another question about what other activities they think they can do with this app.

Accommodations/Modifications

How might I modify instruction for: Remediation? Intervention? IEP/504? LEP/ESL?	I would modify instruction for remediation students by allowing them to work with a partner on the activity because it may take them longer to grasp the concept of coding on their own. For intervention students I will try to help them individually as much as I can. For IEP/504 students I would make sure the lesson followed the plan set forth by the team and if it does not, then I would make extra modifications. For LEP/ESL students I would do the same thing that I did for the remediation students by allowing them to work with a partner on the activity because it may take them longer to grasp the concept of coding on their own.
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Differentiation:

How might you provide a variety of instructional methods/tasks/instructional strategies to ensure all student needs are met?	I would provide a variety of instructional methods/tasks/strategies to ensure all student needs are met by helping individual students that seem to be struggling. Most students will be able to do the activity on their own since there are videos within the app, but there will still be some that struggle and I will help them one-on-one.
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Assessments: Formative and/or Summative

Describe the tools/procedures that will be used in this lesson to monitor students' learning of the lesson objective/s (include type of assessment & what is assessed).	<input type="checkbox"/> Formative / <input type="checkbox"/> Summative	
	<input type="checkbox"/> Formative / <input type="checkbox"/> Summative	
	<input type="checkbox"/> Formative / <input type="checkbox"/> Summative	

Research/Theory

Identify theories or research that supports the approach you used.	
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Lesson Reflection/Evaluation

What went well? What changes should be made? How will I use assessment data for next steps?	<i>TO BE FILLED IN AFTER TEACHING</i>
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Include supporting material such as slides, pictures, copy of textbook, and handouts for any activities students will be using as part of your lesson.

*adapted from: <http://webcache.googleusercontent.com/search?q=cache:EsQcNWuG1ZoJ:web.mnstate.edu/harms/StudentTeachers/edTPA-LessonPlan.doc+&cd=2&hl=en&ct=clnk&gl=us>; <http://www.moreheadstate.edu/getmedia/cd3fd026-939f-4a47-a938-29c06d74ca01/Lesson-Plan-and-Reflections.aspx>; <http://www.mcneese.edu/f/c/9cb690d2/Lesson%20Plan%20Rubric%20Aligned%20with%20InTASC.docx>; <https://www.uwsp.edu/education/Documents/edTPA/Resource12.pdf>; <https://www.uwsp.edu/education/Documents/edTPA/Resource11.pdf>; <https://www.uwsp.edu/education/Documents/edTPA/Resource11a.pdf>; <https://www.uwsp.edu/education/Documents/edTPA/LessonPlanTemplateSOE.docx>; <https://www.uwsp.edu/education/Documents/edTPA/SpecEdLessonPlanGuide.docx>; <https://www.uwsp.edu/education/Documents/edTPA/SpecEdLessonPlanTemplate.docx>