Name: Megan Scott

Lesson Plan

Learning Segment Focus: Excelling Catcher **Lesson 7 of 12**

Course & topic addressed: Math and Technology **Date 12/27/20** **Grade: 3**

Student Outcomes

Specific learning **objectives** for this lesson.	Students will enjoy learning about baseball while tracking basic data in a Microsoft Excel Spreadsheet. Data will be entered into cells and rows, along with learning basic functions, which incorporate math concepts.
Justify how learning tasks are appropriate using examples of **students' prior academic learning**.	Students are building upon math steps they have learned and can see how they relate to functions in a spreadsheet.
Justify how learning tasks are appropriate using examples of **students' personal, cultural, linguistic, or community assets**.	We will be talking about America's favorite past time and students will want to personally share who their favorite team is. Furthermore, students of diversity can share with us if baseball is popular in their culture. If not what sport is.

State Academic Content Standards

List the **state academic content standards** with which this lesson is aligned. Include abbreviation, number & text of the standard(s).	**Grade 3: Operations and Algebraic Thinking** **AR.Math.Content.3.OA.A.3-multiplication and division to solve word problems** **AR.Math.Content.3.OA.B.5-properties of operations to multiply and divide** **D.4.3.1-data can be represented in multiple formats** **D.5.3.1-use tools to collect data** **D.6.3.1-interpret and analyze graphs**

Key Vocabulary

What **vocabulary terms/content specific terminology** must be addressed for students to master the content?	**Spreadsheet** **Cell** **Row** **Percentage** **Data Collection** **Data Analysis** **Story Problem**

Academic Language Support

What are the **Academic Language Function(s)** (the content and language focus of the learning task represented by the active verbs within the learning objectives/outcomes) and explain how they are utilized in the lesson plan? What planned **Academic Language Supports** will you use to assist students in their understanding of key academic language to express and develop their content learning and to provide varying supports for students at different levels of Academic Language development? How do these supports address all three **Academic Language Demands (vocabulary, syntax, and discourse)?**	Students will actively use technology and create formulas for calculation. Reading of the story problem incorporates a Language Arts component. The lesson is created to challenge the students, but adaptations can be made for students needing additional support. New key vocabulary will be introduced and can potentially appear on the end of the lesson quiz. This lesson is building upon math already learned.

Materials

Materials needed by **teacher** for this lesson. (such as books, writing materials, computers, models, colored paper, etc.)	Computer Access Microsoft Excel Computer Lab Projector-Smart Board Pencil Paper Story Problem Answer to the story problem Laminated card with story problem and stats.
Materials needed by **students** for this lesson. (computers, journals, textbook, etc.)	Computer Access Microsoft Excel Pencil Paper Laminated card with story problem and stats.

Lesson Timeline with Instructional Strategies & Learning Tasks

Amount of Time	**Teaching & Learning Activities (This should be a BULLETED LIST)**	**Describe what YOU (teacher) will be doing and/or what STUDENTS will be doing during this part of the lesson. (This should be VERY DETAILED)**
3 minutes	**Introduction**:	Today we are going to analyze data by using an Excel Spreadsheet. We have a story problem to read and then transfer information to a spreadsheet to help answer the question.
47 minutes	**Instruction:**	Step 1: What is the problem. Each student will be provided a lamented card of the story problem. I will read it aloud to the students. A baseball coach has 4 catchers but can only take two on the next road game. The coach put them to the test by having a two week try out and collecting data. Each player had the same amount of playing and game time. Now we know the problem we have been provided some data and need to place it in the spreadsheet. Follow along as I pull up an Excel spreadsheet. The collected stats will be on the lamented story problem. We will enter the information for Catcher #1 together. Reviewing what cells and rows are, type in catcher 1 in cell A1 and continue entering the correct information in the columns and rows. Some information you will not know, and we will have to calculate it. As we go along we will also talk about what these baseball terms are. Once you are finished find the tab at the bottom that says sheet 1 and rename it to catcher 1. To find the number of thrown balls click on cell B5, click on functions in the tool bar and hit fx, from this screen highlight sum and click ok. You will these numbers have been added together. To find the percentage type in cell B7

Amount of Time	Teaching & Learning Activities (This should be a BULLETED LIST)	Describe what YOU (teacher) will be doing and/or what STUDENTS will be doing during this part of the lesson. (This should be VERY DETAILED)
		=B3/B5*100 Review why we are putting an equal sign and why times by 100. Students continue calculating the rest of Catcher #1 stats Once catcher 1 is finished by each student we will walk through creating another sheet and label it catcher 2. Students will be left to finish filling out the spreadsheet while I monitor and assist. Once the students are finished, I want to hear from them which 2 catchers get to travel to the next game.
8 minutes	**Closure:**	Once you are finished write on a piece of paper, fold it and turn it into me. We will see what you suggest. The stats will be documented on the board and I will reveal the answer. For the students that did not come up with the correct answer I will buddy them up with a student that did and I will also help assist to see where a step might have been missed. This has been a lot today but we will be back on this spreadsheet tomorrow to review how to create a chart from the data collected. Time to save our work.

Accommodations/Modifications

How might I **modify** instruction for: *Remediation?* *Intervention?* *IEP/504?* *LEP/ESL?* (All students who have plans mandated by federal and state law.)	To modify the assignment, gift and talented students could be paired with a remedial student. Furthermore, I could provide to students needing modifications typed up step by step process, along with screen shots of our spreadsheet lesson.

Differentiation

How might you provide a variety of techniques (enhanced scaffolding, explicit instruction, contextualized materials, highlighters/color coding, etc.) **to ensure all student needs are met?** (All students who are not on specific plans mandated by federal and state law.)	This lesson plan reviews math which should be built upon throughout the semester and introduces technology. New terms are brought forth. These terms can be provided to the students as a vocabulary list and may even end up on a vocab quiz. Step by step instructions might be needed by all students and will be available. This lesson will be built upon the next day, introducing graphs and jazzing them up with colors, borders, and fonts.

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).	☒ Formative / ☐ Summative	Students will have to perform many instructions on their own and assessment will be based upon their ability to follow directions.
	☒ Formative / ☐ Summative	Verification of correct functions will also be assessed.

	☐ Formative / X Summative	At the end of the week a quiz will be administered based upon the weeks lesson pertaining to spreadsheets.

Research/Theory

Explain **connections to theories and/or researc**h (as well as experts in the field or national organization positions) that support the approach you chose and justify your choices using **principles of the connected theories and/or research.**	**Vygotsky's:** Regarding this theory, my goal will be to help students to become independent problem solvers. By imparting Vygotsky's theory of scaffolding, I will be readily available to assist while waiting in the background and observing.

Lesson Reflection/Evaluation

What went **well**? What **changes** should be made? How will I **use assessment data** for next steps?	*TO BE FILLED IN AFTER TEACHING*

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