TPA Lesson Plan

Your lesson plan should not exceed four pages.

If you refer to a text, worksheet, slides or whiteboard images, make a copy to include for reviewer. These extra items should not exceed five pages.

Subject	**7th grade - Algebra**
Standard	**STANDARD 7.2.4.2 Solve equations resulting from proportional relationships in various contexts.**
Central Focus	To provide experience looking at proportional relationships in real-world examples and solving equations for these real-world situations
Academic Language	**Proportional:** having a constant ratio to another quantity
Objective(s)	SWBAT solve equations from proportional relationships.
Instructional Resources	• Number Neighborhood Game • **https://www.teacherspayteachers.com/Product/Mario-Kart-Proportion-Word-Problems-for-Distance-Learning-4934694** • MarioKart Video: https://www.youtube.com/watch?v=SPt87tB32GE • Cuisenaire Rods

Lesson Part

Anticipatory Set	• *"Hello. I am so happy you are here in class with us today. How is everyone feeling? It is almost the weekend!"* I want to check in with my students as the week is more than half over. • To start class today, we are going to play Number Neighborhood: Directions • Students are going to play this game with their neighbor, the person sitting next to them and they each need a colored pencil or marker. They should be different colors. We will play for about 15 minutes. • This game gets them working with someone who they may not know as well because it is not their choice, but rather just the person they are sitting next to. • Also, it is fun and engaging, but still makes them think mathematically and competitively.
Procedure	• *"Can anyone tell me what we have been learning about this week?"* I hope to get answers like, proportions, unit rate, writing and solving equations for proportions. This just reminds students what our goal is and what we are continuing to learn. • *"I know you all are too young to drive a car, but have any of you played MarioKart?"* Show clip: https://www.youtube.com/watch?v=SPt87tB32GE • *"Well, today we are going to use MarioKart to help us solve some proportions."* • I want students to have a resource available to them while they work on their assignment, so we are going to create a cheat sheet for this unit. • They will design their own MarioKart race track, but somewhere on their track they must include the following: definition of unit rate, synonym for unit rate (constant of proportionality), definition of proportional, explanation of how we know something is proportional (I want to see that they mention it has a constant of proportionality and when graphed, forms a straight line), and an example of a proportional relationship (how they write this can be up to them; as an equation, a table, a graph, a word problem, a proportion as fractions)

	• On the back of the cheat sheet, students are required to show that they can solve their example and prove that their answer is correct. How can you convince me your answer makes sense? • For students who struggle to complete this cheat sheet, I can have pre-made ones available and rather than completing it entirely by themselves, they can have blanks on it to fill in • This cheat sheet has to be checked by me and if it is correct, they will receive the worksheet that follows (this ensures that students have the correct information on their cheat sheet) • Students will complete this worksheet individually: **https://www.teacherspayteachers.com/Product/Mario-Kart-Proportion-Word-Problems-for-Distance-Learning-4934694** • For students who are exceeding, I will challenge them to complete the worksheet without referencing their cheat sheet • Their only assignment will be to finish any problems on the worksheet that did not get done in class.
Assessment	**** include rubric**** Informal Assessment: By checking student's definitions and examples on their cheat sheet, I will have a clear understanding of where each student is at. Verbal Exit Ticket: Also, at the end of the day, having students verbally explain to me one thing they each learned will help me understand if they have a grasp of the topic or not.
Closure	• I want to review one last time what was learned this week. I will call on kids and have them each tell me one thing they have learned. If there are duplicates, I will ask if they can come up with another thing but won't stress about it too much because it is a fairly short unit. This is essentially their exit ticket for the day. • *"Tomorrow, we are going to put together everything we learned this week to complete a fun activity. Your ticket into class tomorrow is your completed MarioKart worksheet."* I will tell students that they must have a ticket to get into class tomorrow, because it is a clue for what our fun Friday will look like.
Accommodations	If any of the language on the worksheet could be an issue, I will rewrite some of the questions using language that could be better understood. Also, I will have cuisenaire rods and other manipulatives available to students who still feel the need to use them.

Rubric

1	2	3	4
SWBAT	SWBAT	SWBAT	SWBAT

Identify a proportional relationship	Write equations from proportional relationships	Solve equations from proportional relationships	Draw conclusions from proportional relationships