

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 Ratio: how much of one thing compared to another thing
Objective(s)	SWBAT solve equations from proportional relationships.
Instructional Resources	<ul style="list-style-type: none">• https://www.teacherspayteachers.com/Product/Ratios-and-Proportions-Activity-Murder-Mystery-Digital-Printable-Activity-3786837?utm_source=Pinterest&utm_campaign=Proportions+Mini+Mystery• Carnival Video: https://vimeo.com/72567681• Cuisenaire Rods

Lesson Part

Anticipatory Set	<ul style="list-style-type: none">• <i>"Hello-- I am so happy you are here in class with us today. All week we have been working on solving equations from proportional relationships and today we are going to work on a fun activity that works on this same skill. How many of you have been to a carnival?"</i>• Show carnival video clip: https://vimeo.com/72567681• <i>"Well, in order to prepare us for our lesson today, we are going to play a carnival game."</i> The game is as follows:• We will have three teams. Each team will attempt to throw a ball into a basket. If they make it, they will receive a problem to solve. If they solve it correctly, they earn 5 points for their team. If they solve it incorrectly, another team has a chance to steal. If they miss the basket, they still have a problem to solve, but they cannot earn any points and must solve it correctly before moving on. We will play for about 15 minutes.
Procedure	<ul style="list-style-type: none">• We will be completing a ratios and proportions murder mystery activity. I will distribute all materials to the students and then they will have the rest of the period to complete the task.• Using cards with the names, heights, weights, and favorite hobbies of each suspect, and a clue sheet. Students will have to solve proportions and ratios to figure out their clues.• This task will be completed individually.• At the end of the activity, students will have the task to write a clue of their own that involves setting up a proportion and solving it. This level of thinking requires them to work backwards starting with the end goal of one final suspect.• For students who find these proportions very challenging, I can simply change the clues to work with easier numbers or easier language. This allows students to all complete the same activity with the same end goal, just in ways that allows all students to be successful.

	Any work of the activity that does not get finished in class, will be homework. However, this should be very minimal.
Assessment	<p>** include rubric**</p> <p>The activity will be handed in at the end of the class. A quick check of if they figured out who the murderer was tells me if they did the activity correctly. However, I will also be able to check their work on the activity to make sure they are understanding the concepts.</p>
Closure	<ul style="list-style-type: none"> • Ask students, <i>"What did we learn about this week?"</i> • Say, <i>"Who can tell me what a proportion is?"</i> • <i>"Where did you see proportions being used in this activity?" "Where may you see one in your own life?"</i>
Accommodations	<p>If any of the language in the activity could be an issue, I will rewrite some of the questions using language that could be better understood. Also, I will have manipulatives available to students who still feel the need to use them.</p> <p>Cuisenaire rods and other manipulatives will be available for students who still need to physically lay out the proportions.</p>

Rubric

1	2	3	4
<p>SWBAT</p> <p>Identify a proportional relationship</p>	<p>SWBAT</p> <p>Write equations from proportional relationships</p>	<p>SWBAT</p> <p>Solve equations from proportional relationships</p>	<p>SWBAT</p> <p>Draw conclusions from proportional relationships</p>