

## Lesson Plan Template

<b>Grade:</b> 5 <sup>th</sup>		<b>Subject:</b> Science
<b>Materials:</b> Pop-Pop Launcher Challenge Bag, poster board, tape, scissors		<b>Technology Needed:</b>
<b>Instructional Strategies:</b> <input type="checkbox"/> Direct instruction <input type="checkbox"/> <b>Peer teaching/collaboration/cooperative learning</b> <input type="checkbox"/> Guided practice <input type="checkbox"/> Visuals/Graphic organizers <input type="checkbox"/> Socratic Seminar <input type="checkbox"/> PBL <input type="checkbox"/> Learning Centers <input type="checkbox"/> Discussion/Debate <input type="checkbox"/> Lecture <input type="checkbox"/> Modeling <input type="checkbox"/> Technology integration <input type="checkbox"/> Other (list) <input type="checkbox"/> Other (list)		<b>Guided Practices and Concrete Application:</b> <input type="checkbox"/> Large group activity <input type="checkbox"/> <b>Hands-on</b> <input type="checkbox"/> Independent activity <input type="checkbox"/> Technology integration <input type="checkbox"/> <b>Pairing/collaboration</b> <input type="checkbox"/> Imitation/Repeat/Mimic <input type="checkbox"/> Simulations/Scenarios <input type="checkbox"/> Other (list) Explain:
<b>Standard(s)</b> 5.3.4: Identify the effects force and mass have on the motion of an object.		<b>Differentiation</b> <b>Below Proficiency:</b> Rings on poster paper will be bigger  <b>Above Proficiency:</b> Rings on poster paper will be smaller  <b>Approaching/Emerging Proficiency:</b> Rings on poster paper will be equal distance apart.  <b>Modalities/Learning Preferences:</b> physical, visual, kinesthetic
<b>Objective(s)</b> By the end of the lesson, the students will be able to explain how forces and mass effect where the pom-poms landed in the rings from the pom-pom launcher challenge.		
<b>Bloom's Taxonomy Cognitive Level:</b> explain		
<b>Classroom Management- (grouping(s), movement/transitions, etc.)</b> The students will be paired up in groupings of three.		<b>Behavior Expectations- (systems, strategies, procedures specific to the lesson, rules and expectations, etc.)</b> The students are expected to work collaboratively in their group to think of the best way to make the launcher. If a student has missing work for another class, they will not be participating in the experiment, instead they will be in the hallway finishing.
<b>Minutes</b>	<b>Procedures</b>	
20	<b>Set-up/Prep:</b> Put together the pom-pom launcher challenge bags. Set up rings on a table.	
5	<b>Engage: (opening activity/ anticipatory Set – access prior learning / stimulate interest /generate questions, etc.)</b> Have sitting out on the table the different materials for the challenge. Have the students look at them as they walk into the room. The students will go straight to their desks to get started on the activity. Ask the students what they think they can make out of those materials on the table. Use this to get their brains working.	
5	<b>Explain: (concepts, procedures, vocabulary, etc.)</b> Follow the instructions on the bag. The teacher will read the bottom boxed in portion to the students. The teacher will have the students open up their bag	
20	<b>Explore: (independent, concrete practice/application with relevant learning task -connections from content to real-life experiences, reflective questions- probing or clarifying questions)</b> The students will construct a pom-pom launcher from the materials in their bags. They will be doing this in groups of 3. The students will have time to practice during their 20 minutes.	
10	<b>Review (wrap up and transition to next activity):</b> To end the lesson the students will take 5 shots from their launcher to see if they can get it into any of the rings. The teacher will ask them questions while this is happening about force and mass. Would it be different if there was something heavy than a pom-pom on the launcher? Maybe a coin. What about if it was lighter? What if you held it down further or not as much? Would the force be greater or less?	
<b>Formative Assessment: (linked to objectives)</b> Progress monitoring throughout lesson- clarifying questions, check-in strategies, etc.		<b>Summative Assessment (linked back to objectives)</b> <b>End of lesson:</b> The students will be assessed on their understanding of force and mass.

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The students will be assessed on what they build.

**Consideration for Back-up Plan:**  
Have the students present their animal PowerPoints.

If applicable- overall unit, chapter, concept, etc.:

### **Reflection (What went well? What did the students learn? How do you know? What changes would you make?):**

Keep the same 5 pom-poms for all the classes. This helps solidify that force and mass matter. It is important to have student start right away on the build time, because then it allows for time afterwards to think about why things worked the way they did and what they would change for later and to ask them specific questions. I think it is also important that all the instructions are given to begin with. In some classes I would add things in during their 20 minutes of building time and that was not fair. To extend this lesson I would give them time rethink their pom-pom launcher and have them rebuild it. (look at worksheets that Mrs. Power has)

4A: feel good, there were 4 projects practiced around 10 minutes left of 20 minute build time. Talked about force and mass afterwards too. I feel like they actually learned something about why we did the project, because we did have that time to talk. Good classroom management (boy and girls come back to me)

4B: feel like it went okay. They were all over the place at the beginning not really a good start to the lesson. Stood and waited until they were quiet had a student that was following instruction well and I praised her for it. And I used her as an example and some of the students responded well to that.

Stood at door and said look at this table and look at board On the board for 4<sup>th</sup> grade: Silently, think about what you could make with the materials you saw on the table as you walked in.

On the board for 5<sup>th</sup>: If you have not looked at the items on the table by the door do so. Then sit silently at your spot and think about what you can make out of those material.

I think the students were really testing their boundaries with me by this lesson, because they were more naughty than normal and they were not listening like they had in the past days.

5A: I had to stop in the middle of the 20 minutes to tell more of the instructions. I had to rush them through the launching time so that everyone could do it. I wish I did not have to do that. I did not leave any time to talk about their launchers and explain why I was doing things that I did.

No wrap up

5B: A little bit better than 5A. I wish for both of them that they could have had time to rebuild/redesign. I think for this class there was better classroom management, but I praised a few students but then did not follow through with some of the praises and I think some students picked up on it. I need to be constant with what I do in the classroom.