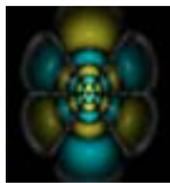


A) New Tool Identification from Physport.org:

[Physlets](#)



Physlets

Developed by: Wolfgang Christian

Level



middle school

high school

intro college

inter-mediate

upper level

grad school



other



calc based



alg based



conceptual

Topics



Setting



B) Description

- a) Why is the inclusion of this tool important?

The inclusion of this tool is important because the simulations are based on pedagogy that supports the effective teaching and learning of many physics concepts. With social distancing in full effect in the classroom, the use of this tool becomes even more important because students are able to view many simple but fundamental phenomena via their personal devices.

- b) What may my students and I learn from this?

Students will learn how to solve problems related to forces and motion. They will also gain a better conceptual understanding through engagement with Explorations. Physlets also has a number of interactive illustrations and animations which can be used to assist students in verifying their predictions, making observations and developing equations. The entire chapter on [mechanics](#) is highly interactive and helpful in understanding forces and motion.

C) Learning Plan

- a) Goals for using this tool

I would use this tool for:

- (1) Supporting students who are struggling to visualize concepts and/or with my visual learners to ensure that their conceptual understanding is sound and that their learning is reinforced.
- (2) Challenging students who require support with bolstering their conceptual understanding.

- (3) Finding out which students are struggling with application of the concepts to real-world scenarios.
- (4) Adding variety to the existing tools that are used to support the teaching and learning of forces and motion.
- (5) Support multiple learning modalities.

b) Next steps for implementing this

Next, I would like to:

- (1) Test to ensure that Physlet works on different electronic devices
- (2) Ask students to explore the website and engage in free play/exploration to familiarize themselves with how the simulations can be modified
- (3) Create a guided inquiry type of activity that consists of a Pre-lab, Lab Activities and Post-Lab
- (4) Ask students to complete the guided inquiry and obtain their feedback on using Physlet
- (5) Ask students to solve problems related to forces and motions
- (6) Ask students to design their own investigation using Physlet to address a question of their own choosing which is related to forces and motion

D) Support and Information can be found:

- i) Books:
[Instructors Guide for Physlet Physics by Anne J. Cox and H. Dancy Physlet Physics book](#)
- ii) Website:<https://www.compadre.org/Physlets/>
 - (1) Read Preface
 - (2) Read System Requirements
 - (3) Read Conditions of Use
- iii) Discussion Forum:
<https://www.compadre.org/osp/bulletinboard/ForumDetails.cfm?FID=107>
 - (1) Find tips and lesson ideas for using Physlet
 - (2) Discuss errors and view fixes for common problems related to using Physlet