

## AP Physics C

### walkSTEM Design Guidelines

#### AP with WE Service Learning

AP with WE Service combines college-level learning from the Advanced Placement Program with WE's service learning model to create an opportunity for AP students to apply their classroom work to the real world. You will engage in service learning activities to strengthen your understanding of AP course content and skills, using what you have learned to tackle real-life social issues.

For your service learning project, you will design and create an interactive, physics-based tour for a location of your choice.

#### Understanding walkSTEMs

- A. Look at the [talkSTEM](#) website to develop an understanding of the goals of the organization. Fun fact: Koshi Dinghra, founder of talkSTEM, completed her PhD research at Marymount in 1998.
- B. Watch the walkSTEM video: [Why is the Tire Swing This Shape?](#)
- C. Watch the walkSTEM video: [What's the Fastest Way to Slide?](#)
- D. Watch the [APC 2019-2020 walkSTEMs](#).
- E. You do not need to write anything. Just understand what information is presented and how that information is presented. Note the length of the videos!
- F. One thing we learned is that you need not be physically present in a location to create a walkSTEM for that location.

**Then**

- A. Find a photo or 5-10 second video of each of your real-world structures/locations.
- B. Mark up the image and add one of your STEM questions to the photo. See the example below. Include your initials somewhere in the photo.



- C. Post your images on Mr. Walters' Science Instagram page :
- D. Tag your photos with: @talkingSTEM #APwithWE #ServiceLearning

## **Your Summer Assignment: Your Own walkSTEM**

**You are working independently on this assignment.**

- A. You will design and create a four stop walkSTEM (an interactive physics-based walking tour) for any location (specifically your favorite location) in the world. (Off limits: Los Angeles, CA. Interlaken/Grindelwald, Switzerland).
- B. Your walkSTEM stops must be in close proximity to one another.
- C. For each stop, complete the [walkSTEM sheet](#) that outlines the specific physics concept highlighted by your stop and how you plan to communicate that information to the general public.
- D. Compile all of your walkSTEM sheets in one document and share it with me.
- E. Complete the [walkSTEM location form](#) with all of your specific locations and specific addresses.
- F. In Google Docs/Google My Maps, create a Google Map with your locations. If you need advice on how to do this, please let me know. Share your map with me.
- G. Think creatively!

## **Your Summer Assignment: The Target walkSTEM**

**You are working independently on this assignment.**

- A. One group in 2019-2020 completed their walkSTEM at Target. Their goal - and now yours - is to bring the walkSTEM to all Targets in the United States.
- B. Shopping carts, frozen foods, shopping baskets and the checkout is off limits.
- C. Think of three examples in which physics is effectively demonstrated in a Target store.
- D. Complete the [Target walkSTEM form](#) with your locations and associated physics concepts.
- E. Think creatively!