

BUILD YOUR OWN DREAM!

As June discovers in the new film **Wonder Park**, dream-power can turn almost anything into a reality. Tap into your dream-power to create a model amusement park ride of your own. Who knows? You might discover that you want to be a real amusement park engineer someday!

PART 1

Your task is to *dream* (discuss with your group), *plan* (sketch out a design), and *build* your own model amusement park ride/attraction.

Things to think about:

- Start by browsing through the Amusement Park Physics glossary at www.learner.org/exhibits/parkphysics/glossary.html to learn how different principles of physics contribute to different types of amusement park rides. Try focusing on just one physics principle to generate ideas for the type of ride you want to build.
- Look through the materials your teacher provides before you decide what to build. If you decide that your ride will rotate or spin, for example, you will need materials to help create centrifugal force.
- Start small, test, and then improve. It's best to start small, make sure your ride works, and then make it better!

Step 1 Dream: Talk about your ideas for your attraction's design with your group. What problems do you think you might encounter, and how will you solve them?

Step 2 Plan: On the back of this sheet, sketch out a plan for your design. See if you can find ways to improve your design as you sketch it.

Step 3 Build: Use the materials provided by your teacher.

Step 4 Test: Test your ride to make sure it works, and then see if you can improve it.

PART 2

Newton's Third Law of Motion states that for every action (force) there is an equal and opposite reaction (force). What are the forces at work in your ride, and how do they act on each other? Describe how your ride works on the lines below. Include a diagram of your ride on the back of this sheet that shows how energy is transformed or transferred throughout the ride. Finally, don't forget to name your ride!



SEE HOW JUNE'S IMAGINATION COMES ALIVE IN WONDER PARK AT A THEATRE NEAR YOU ON MARCH 15, 2019

Get a sneak peek at <https://youtu.be/VML6rQWssSk>

