

# LET YOUR DREAMS SOAR

Amazing things happen when June lets her imagination soar in the new film **Wonder Park** coming to theatres on **March 15, 2019!** Find out what happens when you let your imagination soar by creating a catapult like June's Skyflinger.

## PART 1

Your task is to *dream* (discuss with your group), *plan* (sketch out a design), and *build* a catapult using the materials your teacher provides. Watch the video at [https://youtu.be/WpLFC\\_SOpXs](https://youtu.be/WpLFC_SOpXs) for inspiration.

*Things to think about:*

- Many catapults work by suddenly releasing stored energy. When that happens, potential energy is transferred to the projectile, where it becomes kinetic energy. How can you create tension (stored energy) in your catapult with the materials your teacher gave you?
- What might hold your projectiles before they are launched?

**Step 1 Dream:** Talk about your ideas for your catapult'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 any ways you might improve your design as you sketch it.

**Step 3 Build:** Use the materials provided by your teacher to build your design.

**Step 4 Test:** Place a projectile into your catapult and send it flying! How far can you make it go? See if you can improve your design to make it travel even farther!

## PART 2

Newton's First Law of Motion states that an object at rest will remain at rest unless a force acts on it. The law of Conservation of Energy states that energy is neither created nor destroyed; it is simply transferred or changes from one form to another. Use this information to answer these questions on the other side of this sheet.

1. What do you think is the force that acts on the projectile to send it flying into the air?
2. Describe the path of energy as it travels through the catapult and projectile. Use the words *potential* and *kinetic* in your answer. Include how the energy changes and how it affects the path of the projectile depending on the amount of force applied.



**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>