

Hurricane Harbor Project Kit

Congratulations! You're going to Hurricane Harbor! Use these project ideas to enrich your educational experience in the park. Read through them before you go to make sure you understand the terms and concepts, and to help you determine if you want to expand upon any of them. **You'll find fun facts and printable worksheets at the end of this packet.**

a- elementary level activity b- middle school level activity c- high school level activity

Language Arts

Hurricane Harbor has a lot to do for people of all ages. Be observant and be prepared to write a report on your visit.

- a. Draw a basic diagram of the park and label all of the areas including the ages those areas appeal to. Circle your favorite one and tell why.
- b. Choose one attraction to do your report on. Detail five specific details of the attraction, like estimated height, paint condition, queue condition, etc. Conclude your report with a recommendation for improvement.
- c. Create a report on the types of rides at Hurricane Harbor, who likes to ride them and why. Choose three rides to give more details on including their size, age limits, color, exciting parts, etc.

Materials required: Notebook, pen/pencil

Submission: A copy of your writings/drawing, and any pictures/videos

Teaching or learning notes:

Applied Math

Math is everywhere! Every single attraction at Hurricane Harbor was created using math. Take a look around and find examples of the math you know.

- a. Identify and draw the shapes that you see and where you see them. See if you can find places where simple math equations were used. Document your findings.
- b. Identify the math used to create one particular feature in the park. Outline the concepts and principles you see.
- c. Identify the math used to create one particular feature in the park. Outline the concepts and principles, and use estimation to perform one of the calculations the builders would have used.

Materials required: Notebook, pen/pencil, calculator or smartphone (optional)

Submission: Your calculations, estimations, and conclusions, and any pictures/videos

Teaching or learning notes:

Science

Check out the physics of water slides! All ride designs utilize the principles of Conservation of Energy, inertia, friction, potential and kinetic energy, and gravity. What makes the fast slides fast? Why do sliders slow down when they are going uphill? Why do you get flung from side to side around corners? What is inertia and what affect does it have on slide physics? How do slides use potential and kinetic energy to keep them going? How is energy “conserved” during the slide? What parts do friction and gravity play? What are Newton’s three laws of motion and can you see them working on the slides? How does water change the slide’s physics?

- a. Discuss some of the simpler concepts and try feeling the forces at play on some slides. Compare slides to one another and talk about what goes into building them. Draw one of the slides.
- b. Discuss the concepts and identify as many physics concepts as you can on some slides. Compare slides, and then pick one slide at the park to diagram/map and include the forces you can identify to define how that slide works.
- c. Discuss the concepts, identify them on some slides, and diagram one of them including its use of physics. Design your own slide using the things you’ve learned.

Materials required: Notebook, pen/pencil

Submission: A copy of your drawings, diagrams, maps, or designs, and any pictures/videos

Teaching or learning notes:

Social Studies

Amusement parks are a great place to people watch and learn more about how people interact with one another. Take some time to watch people in line for a slide or for food, around the free play areas, or in families.

- a. Notice how many people are in the park. Are some areas more crowded than others? How does behavior change in the crowded areas versus the non-crowded areas? Do people crowd together or spread out? Why? Discuss these ideas and draw or write about them.
- b. Identify one behavior that you thought was kind, and one that you thought was rude. What was the response to that behavior? Write about your findings including where you saw the interaction and the details of the event.
- c. Discuss crowd control and analyze the layout of the park. How does park layout affect how people move and behave? Discuss the things you've seen in light of larger social environments you've been in. How universal are these techniques of managing people to improve experience? What are your ideas for improving guest experience at Hurricane Harbor?

Materials required: Notebook, pen/pencil

Submission: A copy of your writings/drawings, and any pictures/videos

Teaching or learning notes:

FUN FACTS

- Six Flags began using the Hurricane Harbor brand in 1995 with the opening of Six Flags Hurricane Harbor in Valencia, the first of many Six Flags waterparks.
- Hurricane Harbor is one of the nation's largest water parks, and hosts over 23 slides and attractions on 12 acres.
- On Tornado and you'll ride with friends in a giant tube down a 132-foot enclosed tunnel to descend into a giant 60-foot tall funnel lying on its side. Thousands of gallons of water flush riders back and forth, up the walls, and eventually out the end!
- Coiled Cobra and Twisted Fang are the two tallest fully-enclosed water slides in all of Southern California!
- Lost Temple Rapids is great for the whole family and is 60 feet tall!
- Resist the urge to go down some of the slides head first! Physics is important and the slides can actually be dangerous when the center of gravity is changed. On September 30, 2012, a 19-year-old man fell off the Venom Drop slide that was part of the Black Snake Summit slide complex. The man ignored the life guards and went down the slide head first on his stomach when protocol is to go down feet-first on the back. He fell off the slide halfway down and hit the concrete! Luckily, he lived, though he probably never went down another slide head first again. Not a fun fact, but definitely an important one!

Hurricane Harbor

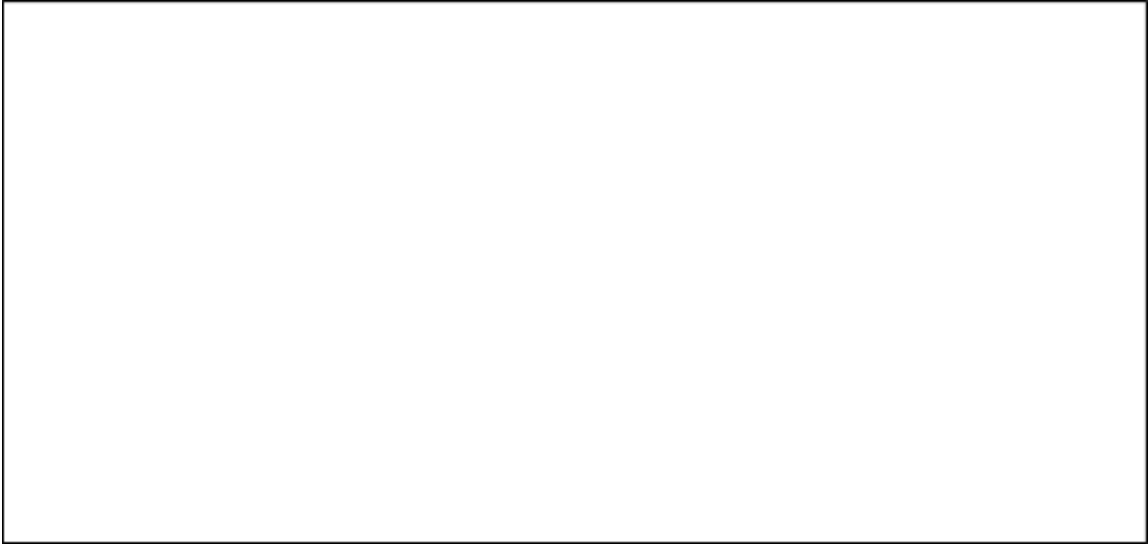
1. Draw a picture of your favorite slide.



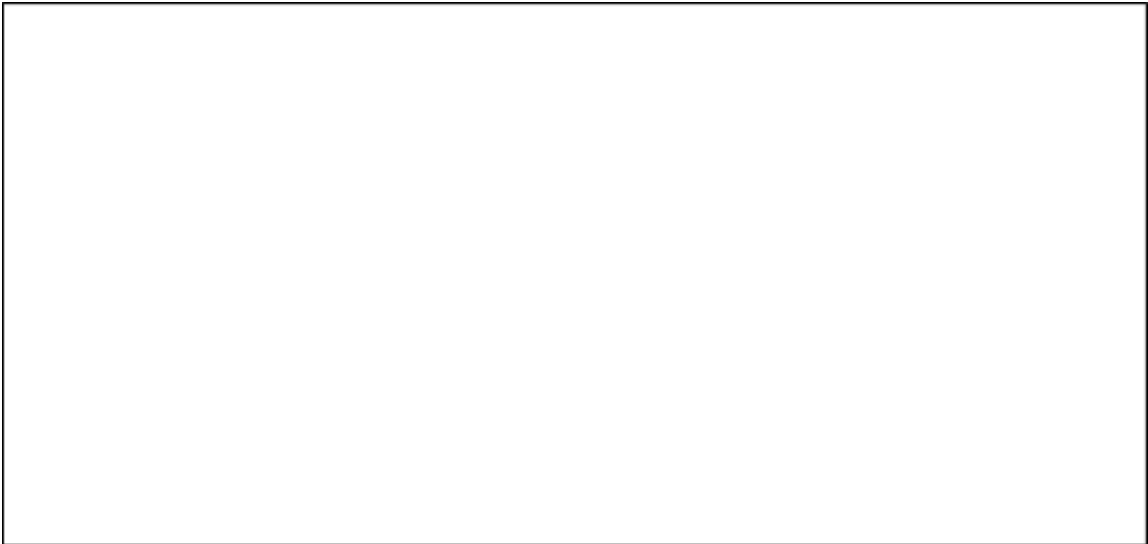
2. Describe your favorite slide and why you love it.

3. Which waterslide is the fastest? The tallest?

4. Draw or describe one example of engineering you saw.



5. Draw a simple replica of the park map including some labels.



6. What is inertia and when do you experience it?
