

## Great Wolf Lodge Project Kit

Congratulations! You're going to Great Wolf Lodge! 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**

Great Wolf Lodge 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 lodge 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 activities at Great Wolf Lodge, who likes to do them and why. Choose three activities to give more details on including a brief description, age limits, 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 Great Wolf Lodge 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 lodge. Outline the concepts and principles you see.
- c. Identify the math used to create one particular feature in the lodge. 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**

Themed hotels 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 at the lodge. 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 lodge. How does lodge 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 Great Wolf Lodge?

Materials required: Notebook, pen/pencil

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

Teaching or learning notes:

# FUN FACTS

- Great Wolf Lodge is California's first and only indoor water park resort.
- With over 105,000 square feet of indoor water park action, there are so many fun things to do including the jaw-dropping Wolf Tail, the Howlin' Tornado signature thrill slide, Wolf Rider Wipeout surf simulator, a massive water fort tree house with a gigantic tipping bucket, zero-depth entry pools, a wave pool and so much more.
- The United States has the largest and most concentrated water park market, with over a thousand water parks and dozens of new parks opening each year.
- Our bodies are approximately 70% water. And about 70% Earth's surface is covered with water too!
- The Earth is a closed system, meaning that it rarely loses or gains matter. The same water that exists today existed millions of years ago. You could be swimming in the same water dinosaurs swam in!

# Great Wolf Lodge

1. Draw a picture of your favorite slide.



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

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3. Which waterslide is the fastest? The tallest?

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



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



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

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