

Mystery Spot Project Kit

Congratulations! You're going to the Mystery Spot! Use these project ideas to enrich your educational experience. 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

The Mystery Spot inspires the imagination. What would it be like if you built a house and lived there? Use your surroundings and your imagination to create a piece of fictional writing.

- a. Draw a storybook or write a short story with illustrations inspired by the house.
- b. Write a short story inspired by your visit, including a main character and the main elements of a story (setting, plot, conflict, and resolution).
- c. Choose between writing a fictional first-person narrative or a screenplay inspired by your visit.

Materials required: Notebook, pen/pencil

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

Teaching or learning notes:

Applied Math

The Mystery Spot is a place where physics and geometry seem to not follow their own rules. We use math in physics and geometry to determine how things should behave. Use math to try to find out why the Mystery Spot is so mysterious.

- a. Use length and measurement to take a closer look at the what happens when two people stand on the board to see who is taller. How is the Mystery Spot different than normal? How can the placement of the boards affect what you see?
- b. Look closer at one aspect of the house. How is it built? How is it angled? How does the slope affect the way people appear inside? How did the builders use angles to create the space?
- c. Take a closer look at the ball that rolls uphill. How does gravity normally make a ball behave? What math is used to determine which direction a ball will roll and how fast? Why does this ball appear to roll uphill? Use vectors to explain your answers.

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

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

Teaching or learning notes:

Science

The Mystery Spot is a great place to study gravity!

- a. What is gravity and what does it do? Why is it important?
- b. Use drawings to show the differences between what would happen in a normal room, and what happens at the Mystery Spot. How can gravity be used to explain the differences?
- c. Use drawings to explain what is happening at the Mystery Spot and how gravity can be used to create amazing optical illusions. What might cause the gravity to act strangely in the area of the Spot? Is it acting strangely, or does it appear to act strangely?

Materials required: Notebook, pen/pencil

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

Teaching or learning notes:

Social Studies

The Mystery House has a rich history. Read the account of the founding of the Spot here: www.mysteryspot.com/history-of-the-mystery-spot, and then dig a little deeper.

- a. Write or draw about the beginnings of the Spot and what it might have been like to have been there.
- b. Learn more about George Prather. What skills or experiences did he have that would have been helpful in his building of the Spot?
- c. When was the Spot discovered and when was it opened to the public? What else was happening in the world at that time that might have made the Spot so popular?

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

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

Teaching or learning notes:

FUN FACTS

- The Mystery Spot is a supposed gravitational anomaly in a circular area 150 feet in diameter.
- It was discovered in 1939 and opened to the public in late 1940.
- George Prather moved to Santa Cruz after living and working in Oregon for many years. His history and how he came upon the Mystery Spot is fascinating, but no spoilers here... look it up for yourself. :)
- O'Neill Wetsuits has its headquarters in Santa Cruz, where it has been since the 1950s. The company is credited with inventing the modern wetsuit.
- Three Hawaiian princes surfed the mouth of the San Lorenzo River on locally made redwood surfboards in 1885. The account of their visit is one of the first public mentions of Santa Cruz.
- Hypothetically, if you dug a tunnel from one side of the Earth to the other and jump in, you would accelerate toward the centre, reaching a speed of around 7,900 metres (25,919 feet) per second. In the centre, you would be momentarily weightless, but inertia would continue to carry you through the tunnel. You would then decelerate as you exited, emerging from the other end 42 minutes later.
- Plants and animals have evolved amazing ways to sense Earth's gravitational pull. In the sea, bony fish have floating calcium carbonate deposits in their heads called 'earstones', which are pulled down by gravity. On land, plants have starch grains in their root tips, which sink toward the ground, helping to guide their roots downward.
- The gravitational pull of the Moon has a noticeable effect as it tugs at the Earth; it pulls on the water, causing the oceans to bulge. As Earth and the Moon orbit together, water on the opposite side of the planet also bulges outward, thanks to centrifugal force. As the Earth spins on its axis, these bulges move, causing tides.

Mystery Spot

1. Draw a picture of your favorite part of the Spot.



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

3. What is one thing you learned about gravity?

4. Draw an architectural aspect you thought was interesting.



5. Describe or draw landscaping you thought was interesting.



6. What is one thing you learned about Mr. Prather on your trip?

BONUS:

Mystery Spot Scavenger Hunt!

- Something natural _____
- Something that you can eat on _____
- Something that hangs _____
- Something old _____
- Something smaller than your hand _____
- Something larger than your car _____
- Something modern _____
- Something that holds water _____
- Something with triangles _____
- Something made out of wood _____
- Something made out of metal _____

