An Educator’s Guide to Land of Make Believe®!

An Opportunity for Education and Creative Play
Land of Make Believe® is a special park designed specifically with fun, excitement and learning in mind! With so many things for your students to see, discover, and explore, learning opportunities are countless! This guide provides suggestions on how to incorporate your visit into your lesson plans and ideas to help you extend the learning experience once you are back in your classroom.

Preparing Your Chaperones
Chaperones have been entrusted with the welfare and supervision of the students in your charge. In order to maintain safety at all times, as per New Jersey State Law, all children and adults must follow all written and verbal rules and regulations of the park.

To help your chaperones meet these regulations, please ask them to:

- Have the cell phone number of your group leader in case of emergency.
- Remain engaged in actively supervising their students throughout the duration of their visit.
- Measure each child to ensure they meet mandated height requirement prior to getting on line at each ride.

Preparing Your Students
For the safety and enjoyment of all of our guests, we ask that you kindly reinforce good manners and best behavior with your students. Understanding that there may be other school groups visiting with us on the day of your trip, please plan ahead by instructing your students to practice patience if waiting in line for their turn to ride or play. Some ways to pass the time include:

- Counting seats on the ride.
- Singing songs.
- Telling stories.
- Voting on which ride to go on next.

Lesson Ideas For Your Visit
Some lesson ideas follow on the next pages to help you make the most of your day and visit. The lesson ideas can be modified for all ages in the following subjects:

Language Arts • Math • STEM • Art • Social Studies
**Language Arts**

Students can write narrative stories about their trip using sensory imagery. You can ask them questions about their senses during your trip so they can connect the Land of Make Believe® to their senses and maybe even write stories about it!

Some questions you can ask to help them write their stories include:

- What are some things you might see?
- What kind of smells do you think you will experience?
- What kind of sounds will you hear?
- What kind of food will you taste?
- What do you hear when you are on the rides?
- How will you feel when you are there?

**Math**

While on site at Land of Make Believe®, there are many ways to practice counting and math!

You can ask students:

- How many roller coasters are there versus other rides in the park?
- How many Candy Canes are in the Candy Cane Forest?
- How many are red, how many are blue, how many are green, how many are yellow?
- What is the percentage of each color?
- Which color is your favorite?
- Did you notice there is even a glitter Candy Cane?
- How many different food items are available throughout the park?
- Make a list of the items and what their prices are.
- Choose what you would like for lunch and calculate how much that lunch would cost.
- Using multiplication, determine how much you would have to pay if you bought lunch for your whole class.

**STEM**

**Roller Coaster Physics** - Physics in an Amusement Park can be pretty “amusing” to your students!

Some great questions to ask your students include:

- Which passenger travels the farthest on the Flying Pirate Ship ride — the one seated in the center or the one seated on the outside?
- Which horses on the Carousel move the fastest — the ones on the inside or the ones on the outside?
- Compare the movements of rides with motions such as pendulum (Scream Machine), centrifugal (Tilt-A-Whirl or T-Rex), linear (Drop N Twist), or rotating (Carousel).
- How does each ride operate?
- What material are the rides made out of?
- How are Newton’s 3 Laws related to the rides?
- What causes the feeling of “weightlessness” on a pendulum ride?
- Why do riders experience high g-forces on pendulum rides?
- How does a freefall ride work?

**Engineering** — Back in class, give students a limited amount of time and materials (such as popsicle sticks and string) to create their own Magical Ferris Wheel just like the one at the Land of Make Believe®.

Ask them:

- What kind of shapes make up the engineering design?
- Are these shapes symmetrical?
- Why is symmetry important in Ferris Wheel engineering?
- Do you know why you feel lighter at the top of the Ferris Wheel and heavier at the bottom?
- How does centripetal acceleration come into play?
Computer Skills - When preparing for your visit, let your children know about what they may discover at Land of Make Believe® by visiting our website together at www.Lomb.com.

Geology - A visit to our Mining Company is always educational! Below is some background and fun facts you can share with your students to make the most of their experience while sluicing to find their own gems and fossils.

Some questions you can ask your students include:

- What exactly are fossils?
- What layer of the Earth are they typically found in?
- What information do they give scientists, and how?
- What is paleontology?
- What are minerals?
- What is the difference between a rock and a mineral?
- Draw an example of a cubic crystal.
- Draw an example of a hexagonal or trigonal crystal.
- Draw an example of a monoclinic crystal.

Background on Minerals: Minerals are inorganic solids that have characteristic chemical composition and specific crystal structure. More than 4,000 have been found on Earth! Many minerals form beautiful crystals, but the most prized of all are gemstones. Gems and minerals are divided into several categories: precious and semiprecious, organic and inorganic, or crystalline and amorphous. Why are they divided into these categories? Challenge your students to list examples of each. A common method to rank gemstones and minerals is the MOHS Scale of Hardness. Which gemstones and minerals are the softest, which are the hardest?

Fun Facts about Minerals:

- Garnet was named after the seeds of a pomegranate.
- The largest diamond found in the United States, to date, is known as the “Uncle Sam Diamond.”
- It takes anywhere from one to three years to grow a cultured pearl.
- The Queen of England’s jewelry collection is worth an estimated $57 million dollars!
- In the Middle Ages, women believed wearing Opals would protect the color of their blonde hair.
- Peridot was Cleopatra’s favorite gemstone.
- After millions upon millions of years, it is assumed that the Sun will become one large diamond star!
- One of the largest Sapphires known, called the “Star of India”, is currently housed at the Smithsonian Museum of Natural History in New York City. It is estimated to weigh approximately 563 carats!

Background on Fossils: Fossils are nature’s records of animals and plants that lived a long, long time ago.

Fun Facts about Fossils:

- Fossils have been found on every continent in the world.
- The largest fossil ever discovered is a petrified tree found in Thailand. The tree was more than 237 feet long, and was probably much taller when it was still living!
- Scientists have found fossils of dinosaurs with feathers.
- There are public places called fossil beds where anyone can go find fossils to collect.
- The oldest known fossil is blue-green algae that lived in South Africa about 3.2 BILLION years ago!
- Paleontologists recently discovered the fossil of a very tiny dinosaur in China. Named the Microraptor, this dinosaur was only the size of a crow.
- Fossils are the reason scientists can estimate when the dinosaurs went extinct.
- The largest dinosaur ever discovered is the Argentinosaurus, which was 110 feet long. Can you guess by its name where it lived?!
Art
Assign students to pick out the overall theme of Land of Make Believe®, as well as themes for some of the various rides. Ask the students to design and draw their own themed amusement park.
Ask them:
- What colors do you see?
- Where do you see these colors?
- Why do you think choosing the colors is important?
- What images, sounds and colors appeal to you and why?
- Which colors are warm colors?
- Which colors are cool colors?
- Are there any colors which are neutral? If so, where do you see them?

Social Studies
Map Skills – Grab a Guide-map and create a scavenger hunt game to help students practice their map reading skills.

- What is used on the map to represent the Games at the park?
- Do you need to cross the railroad tracks to get from the Candy Cane Forest to the T-Rex ride?
- Which is farthest from the Thriller Rollercoaster – the Arcade or the Flying Pirate Ship?
- Is the Games area closer to the Cookie House or closer to Santa’s Barn?
- Count how many steps it takes to walk from the Magic Dragon to the Scream Machine 360.
- Draw an X on your map in front of Santa’s Barn.
- If you were in Santa’s Barn and you wanted Cotton Candy, how many different routes could you take to get there?
- Draw the shortest route from The Train Station to the Pirate’s Fort. Be sure to use a bridge to cross the Lazy River!
- Draw the shortest route from Middle Earth Theater to Colonel Corn, the talking Scarecrow. Be sure to stop at the Railroad Tracks if the bells are ringing and the lights are flashing! Wave to everyone on the Train!

Provide your students with interesting historical context regarding this region, at a time in history when it was considered the Western Frontier!

Jenny Jump Legend
Did you know Land of Make Believe® is home to a historical legend?!

The Jenny Jump Legend is a story that takes us back to approximately 1748, just about 270 years ago, shortly after the time when Settlers first came to this part of New Jersey.

A nine year old girl named Jenny is believed to have lived in the historical house on site, which is located behind Colonel Corn, the talking scarecrow. The legend tells us that one day, while Jenny was picking berries near the large rock at the head of the glen, she was surprised by hostile Native Americans, who chased her.

As it is very hard to climb down quickly from that height, Jenny, in her fright, screamed down to her father for help. He quickly sized up the situation and yelled “Jump Jenny Jump, Jump Jenny Jump!” Jenny obeyed her father and jumped from the top of the rock to the very rough ledge below. What happened next remains a mystery to this day! The Indian Trail which runs alongside the glen is still discernible today!

Jenny and the Jenny Jump Legend have become so well known that the state of New Jersey has officially named this mountain The “Jenny Jump Mountain”, preserving most of it into a state forest.
The original house, now well over 270 years old, consisted of four rooms - two rooms downstairs and two rooms upstairs. When Jenny’s family built this house they used the stones, trees and natural materials that were close by. As you can see through the window of the home, the old house still has the original hand hewn beams, the original floor and fireplace. An addition to the house was built about 100 years ago. You can see the difference in the siding, the windows, and even the slate on the roof. The exterior and some of the interior of the Jenny Jump House was restored for the opening of the Land of Make Believe® in 1954.

Just imagine - when Jenny lived here there was no kitchen, as all of the cooking was done at the fireplace! She obtained her water from either the well or from the brook. You can see the old hand drawn well pump outside the front door! Jenny had no bathroom, no telephone, no electricity, no radio, no internet, and no television! In Jenny’s day, people had very little furniture and no closets, so they stored everything in trunks.

Take a ride on Land of Make Believe®’s Off-Road Safari Adventure to hear more about what life was like in the pioneering days. You’ll be traveling on old wagon roads that Jenny herself most probably traveled on - all preserved by Land of Make Believe®.

We are happy to have this old house and its legend, the Jenny Jump Glen, The Waterfalls, The Brook, and beautiful hemlock trees as part of the Land of Make Believe®, and are proud stewards of this important chapter of New Jersey pioneering history.

Lessons in History

Land of Make Believe® is the proud home of a genuine Douglas DC-3 airplane cockpit!

Starting your trip at the authentic Douglas DC-3 Airplane Cockpit right near the park entrance enables you to encourage your students to take control and pilot a course for the start of their own adventure!

The Douglas DC-3 is widely known as the airplane that revolutionized air transport in the 1930’s and 1940’s, whose lasting effect makes it one of the most significant transport aircraft ever produced!

The first DC-3 flight took place on December 17, 1935. The DC-3 was fast, had good range and could operate from short runways. It was also reliable and could carry passengers in greater comfort than previous aircraft, pioneering many air travel routes.

Civil DC-3 production ended in 1942 and military production began, where it quickly established its reputation and became the most important airliner in history. Carrying two twin 1,100 horsepower 9 cylinder radial engines, the DC-3 was used by the military in all imaginable roles. The DC-3 transported freight, personnel, and was active in all theaters of war, notably the D-Day landings in Normandy and subsequent assaults by Allied airborne Forces.

It is also said to be the aircraft 5 Star General Dwight D. Eisenhower was flown in during his command of the European Allied Forces during World War II!

The specifications of the Douglas DC-3 include:
- Wing span: 95 feet, 2 inches
- Length: 64 feet, 8 inches
- Height: 16 feet, 11 inches
- Weight empty: 16,865 pounds
- Weight gross: 25,199 pounds
- Maximum speed: 230 miles per hour
- Cruise speed: 207 miles per hour
All Aboard!

**History of the C.P. Huntington Locomotive** - During the time of the Civil War, a special steam locomotive was built by the Danforth-Cooke Locomotive & Machine Works in Paterson, NJ. Named in honor of Collis P. Huntington, the third President of the Southern Pacific Railroad Company, the C.P. Huntington Steam Locomotive, was built in 1863. It was first used on April 15, 1864 and contributed to constructing the western portion of the First Trans-Continental Railroad in North America.

This is an important legacy of New Jersey and of the United States and we have a model train of it that you can ride on site! It is said the unique design of the C.P. Huntington inspired the appearance of “The Little Engine That Could” in most storybook renderings, so make sure to enjoy a ride on it when you visit!

The specifications of the C.P. Huntington Steam Locomotive include:

- Power Type: Steam
- Builder: Danforth-Cooke Locomotive & Machine Works
- Build Date: October 1863
- Locomotive weight: 39,000 pounds (18,000 kilograms; 18 metric tons)
- Adhesive weight: 18,500 pounds (8,400 kilograms; 8.4 metric tons)
- Operated by: Central Pacific Railroad, Southern Pacific Railroad

**After Your Visit**

We truly hope you and your class enjoy your experience together at Land of Make Believe®. We enjoy having you visit us and look forward to seeing you again!

Once you are back in your classroom, the sharing experience can continue. Some questions you may ask younger students include:

- What type of rides did you go on?
- Did they go up and down, or round and round?
- Which was your favorite? Why?
- Which ride was the scariest?
- How did the rides make you feel? Describe the sensations you felt.
- How many rides did you go on? Let’s count them using the map.
- What kind of food did you eat?
- Which was your favorite?
- Did you play any games?
- What was your favorite part of the trip?

Please feel free to share your experiences with us.

Let us know what your students loved best about their day at Land of Make Believe®. Our staff loves to receive mail from the children who visit us!

**Land of Make Believe**  
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**See you next year!**

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