

Self-Guided School Field Trips



TEACHER GUIDE – LEVEL 3

GRADES 6-8

STUDENT SHEETS INCLUDED



Welcome to LEGOLAND®

LEGOLAND® Florida's Field Trips Program connects learning and fun together like LEGO® bricks!

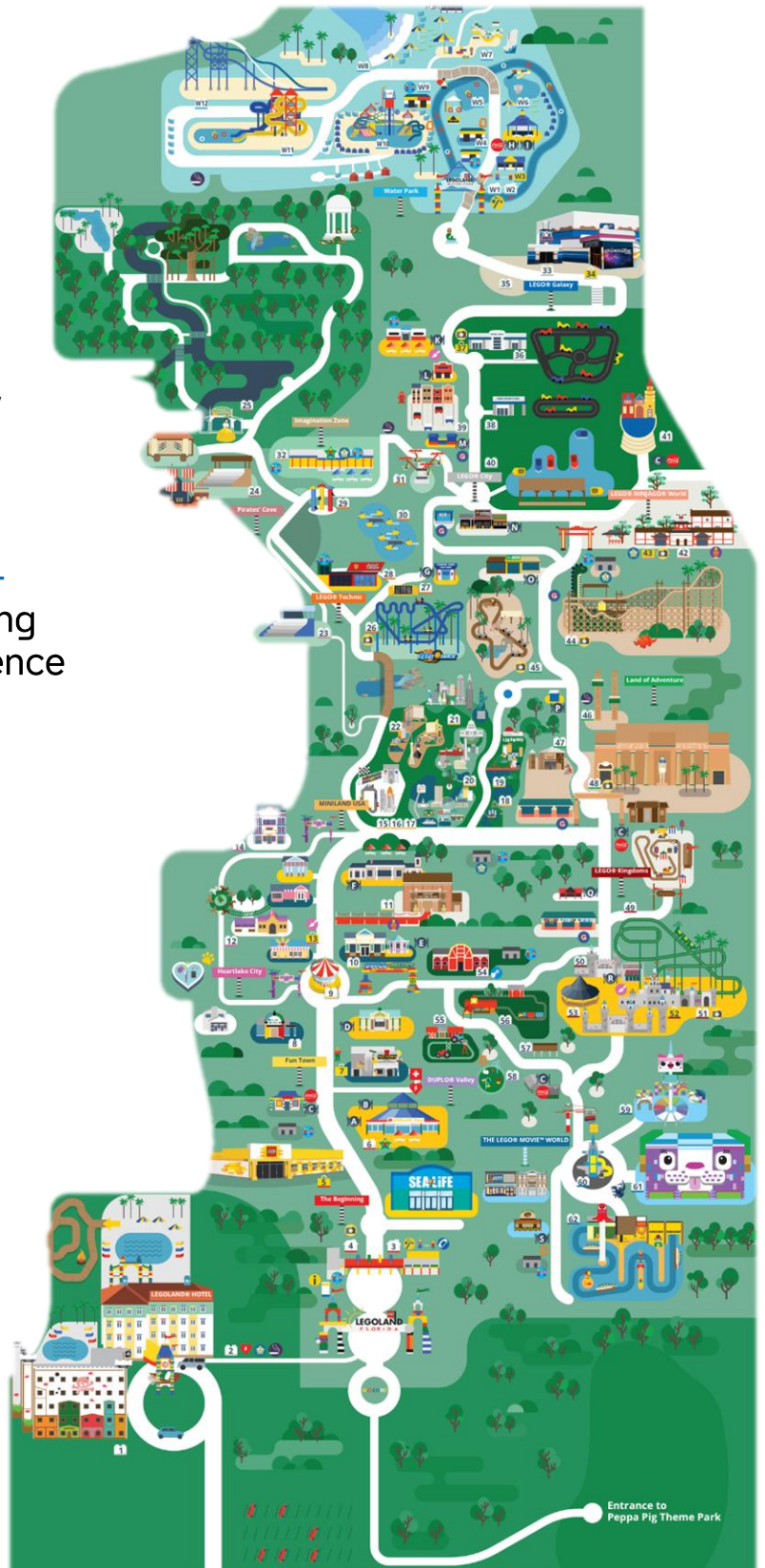
Welcome, Teachers! Your class adventure starts here.

Our self-guided school visits allow students to explore, discover, and create in an engaging environment filled with hands-on activities. The guide is designed to add fun, focused, and interactive learning during your Field Trip.

This guide includes Florida curriculum-based challenges and activities covering Mathematics, English, History, and Science for 3 attractions, including:

1. **LEGO® Ferrari Build & Race:** Design and test your way to the finish line!
2. **MINILAND USA:** Marvel at LEGO landmarks while learning about geography.
3. **SAFARI TREK:** Lions, tigers and elephants, oh my! Can you spot your favorite LEGO® animals on this safari ride?

The attractions can be visited in any order. To make the most of your visit, we recommend dividing your class into smaller groups, each led by an adult chaperone.



LEGO® Ferrari Build & Race

This hands-on experience supports creativity, problem-solving, collaboration, and early engineering concepts through experimentation and iterative learning.

Students will design and build their own LEGO® Ferrari race cars, testing and refining them on three tracks to see how different design choices affect speed and performance. They can also digitally customize their cars before racing in the virtual race zone for a chance to set the fastest lap at the legendary Pista di Fiorano.



Challenge

Have students build their cars and race them against their peers' creations. Ask them to observe which cars perform the best and identify the design features that may contribute to speed. Then, have students mark on their worksheet which listed features helped the cars go faster. Encourage them to compare results and discuss how different design choices impacted performance.

Back at School

Have students review the data from the Build and Race activity to identify which design features made cars faster. Ask them to determine the five most important features and list them. Then, have students create a visual design of a car that incorporates these key elements.

Curriculum Standards Addressed

- Investigate and describe that an unbalanced force acting on an object changes its speed, or direction of motion, or both. (SC.6.P.13.3)
- Use modeling and simulations to test scientific hypotheses (SC.7.PE.3.3)
- Utilize data from simulations to test hypotheses. (SC.8.PE.2.3)





Create your own LEGO car and race your car on the ramp. Ready. Set. GO!

Challenge

Build cars and then race them on the ramp. Tick which design features makes your car go faster:

- Big wheels
- Small wheels
- Long body
- Short body
- Low body
- Tall body
- Wide body
- Thin body
- Dark colored bricks
- Light colored bricks
- Windshield
- No windshield
- Heavy car
- Light car



Back at School

Review your test data and write 3-5 sentences of what was most important to achieve the fastest race car:

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.....

Draw the race car featuring the 5 most important design elements:

MINILAND USA

A miniature replica of the United States, MINILAND USA features some of the most loved buildings and landmarks, plus local destinations all made of LEGO®.

Challenge

Students are challenged to explore MINILAND, focusing on areas such as sports, transportation, and historical sites. Encourage them to use the informational guides to identify key locations and take notes on their favorite landmark. Students will choose one landmark to write about in detail in their activity.

Back at School

Students will choose one landmark that resonates with them the most and write a persuasive paragraph. In their writing, they'll explain why the landmark is significant, considering questions like:

- What makes the landmark culturally or historically important?
- Why might a building be created to honor important moments in history?
- How does Miniland USA reflect cultural diversity and different cultural groups?
- How does a landmark represent people in the community?

This activity encourages students to think critically about cultural significance, history, and community representation while honing their persuasive writing skills.

Curriculum Standards Addressed

- *Students justify opinions or persuade others by citing and using relevant textual evidence from literary or informational texts, or by drawing on relevant background knowledge, to support their ideas with clarity and accuracy. (ELA.68.C.1.1, ELA.K12.EE.6.2)*
- *Access new information on historic and/or contemporary influences that underlie selected cultural practices from the target language and culture to obtain new knowledge in the content areas.(WL.K12.IL.7.2)*
- *Write longer and more detailed literary and informational texts collaboratively and independently, using appropriate organization, style, and register, and support their ideas with evidence. (ELA.68.C.1.4)*



More Info:

Daytona International Speedway: Constructed out of nearly 300,000 LEGO® bricks, feel the rush as you experience the "World Center of Racing" at 1/20 scale.

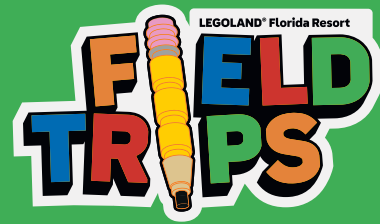
Las Vegas Strip: Features replicas of famous hotels and landmarks with a miniature glimpse into the vibrant city.

Washington, D.C.: National Mall models including the U.S. Capitol, Washington Monument, and the Smithsonian Castle, all meticulously crafted to capture the essence of the nation's capital.

New York City: This section includes representations of Manhattan, featuring Central Park, Times Square, and the Empire State Building reflecting the city's dynamic skyline.

TEACHER GUIDE – GRADE 6-8

MATH IN MOTION: LEGO® NINJAGO® The Ride or Lost Kingdom Adventure



Students will track their scores as they aim, blast, and compete against their fellow classmates on one or both of these action-packed indoor activity rides.

Please note: Children between 30" and 48" may only ride with a supervising companion at least 14 years old and 48" tall.

Challenge

Students will earn points while riding, encourage them to record their scores to complete the follow up data visualization activities back at school. This activity can be completed on either, or both rides.



Curriculum Standards

- *Develop an understanding of statistics and determine measures of center and measures of variability. Summarize statistical distributions graphically and numerically. (MA.6.DP.1)*
- *Represent and interpret numerical and categorical data. (MA.7.DP.1)*
- *Represent and investigate numerical bivariate data. (MA.8.DP.1)*

Back at School

Students will analyze and reflect on their experience by recording and comparing scores from the interactive ride(s).

Using the recorded scores from their ride group:

- Record all four riders' scores and organize the data in a table or graph.
- Calculate the average score and identify the highest and lowest scores.
- Determine the range and compare how each rider's score relates to the group average.
- Identify any patterns or trends and explain what the data shows about the group's performance.

This activity helps students use real-world data to practice mathematical skills such as calculating averages, analyzing variability, and visualizing data through graphs and comparisons.



STUDENT WORKSHEET: GRADE 6-8

MATH IN MOTION: LEGO® NINJAGO® The Ride or Lost Kingdom Adventure



Aim, blast, and compete against your classmates as you collect real data for hands-on math challenges.

Challenge

Use the tracker to record your group's scores:

Score 1

Score 2

Score 3

Score 4

Winner:

.....

Use your scores to determine the following:

Mean:

Median:

Mode:

Minimum:

Maximum:

Range:



Back at School

Then, draw a graph that demonstrates the four scores. What patterns or trends do you see?

