HIGH ROLLER
OBSERVATION WHEEL
LAS VEGAS

HIGH ROLLER S.T.E.M. FAMILY FIELD TRIP GUIDE

BEFORE BOARDING HIGH ROLLER (five-minute discussion)
Begin your journey at The LINQ Promenade. At the fountain next to In-N-Out Burger, check out the High Roller Observation Wheel and discuss what your child may already know about observation wheels. Ask: Where else have you seen observation wheels? What do you know about them? Why do we have them? What do you think High Roller looks like from the inside?

IMAGINE THE POSSIBILITIES (five-minute discussion)
Let your child explore the design and engineering possibilities of his or her own observation wheel. Ask: What kinds of things would your observation wheel have? Is the cabin open to the outside or closed in? Are all the cabins the same color? How many people can each cabin hold? Can they sit down or walk around inside?

HOP ABOARD HIGH ROLLER AND OBSERVE (ten-minute discussion)
For the first part of the ride, allow your child to observe the High Roller. Then ask: How fast do you think High Roller is going? How high up do you think we are? How much weight can fit in one cabin? How is the wheel powered? Is the energy to power the wheel transferred from place to place by sound, light, heat or electric currents?

FROM THE TOP (five-minute discussion)
When nearing the top, have your child observe views of the Las Vegas Strip. Ask: Where would you build your observation wheel? Do you think there would be enough room? How would you make it safe? How tall it would it be? Also at this time, have your child point out buildings and areas he or she may be familiar with. Ask: Which direction is our house? Can you point to your school from here? Where is Mt. Charleston? Can you see Red Rock from here? Which direction is Lake Mead?

COMPARE AND CONTRAST (five-minute discussion)
While descending, your child will compare his or her design to High Roller. Ask: What do you like about High Roller's design? How is High Roller different from your observation wheel?

DID YOU KNOW? (five-minute discussion)
Share fun facts about High Roller with your child to give them a better understanding of High Roller's design: Did you know High Roller is the tallest observation wheel in the world at 550 feet? Each cabin weighs 44,000 pounds and is 23 feet in diameter. High Roller observation wheel weighs over 7.2 million pounds and is reinforced by 112 cables, which stretch 5.3 miles when placed end-to-end. The exterior of High Roller has 2,000 color-changing LED lights that can be choreographed to music.

HIGH ROLLER®
OBSERVATION WHEEL
LAS VEGAS

ANSWER KEY

BEFORE BOARDING HIGH ROLLER (five-minute discussion)
Answers vary, though you may note there are currently 12 observation wheels in the world:

High Roller, Ain Dubai (being built), Singapore Flyer, Star of Nanchang in China, Sky Dream in Taiwan, London Eye, Redhorse Osaka Wheel in Japan, Wheel at Icon Park in Orlando, Melbourne Star in Australia, Zhengzhou Ferris Wheel in China, Changsha Ferris Wheel in China, and the Tianjin Eye in China.

Construction on High Roller began in 2011 and parts of High Roller came from countries around the world, including China, Japan, France, Sweden, Italy, Netherlands, Germany and United States.

IMAGINE THE POSSIBILITIES (five-minute discussion)
This topic should inspire imaginative discussion; all answers will vary.

HOP ABOARD HIGH ROLLER AND OBSERVE (ten-minute discussion)
Students should be encouraged to use their observational skills to draw reasonable conclusions. Answers follow:

- *High Roller rotates one foot per second, completing one full rotation in 30 minutes.*
- *High Roller's total height is 550 feet.*
- *Each of High Roller's 28 cabins can hold a maximum of 40 people, equating to approximately 7,200 pounds.*
- *The wheel is powered by electric energy which is transferred from place to place by electrical currents. It is powered by a 10,000-horsepower hydraulic motor.*

FROM THE TOP (five-minute discussion)
Answers will vary, though you may note:

- *Mt. Charleston is the tallest mountain visible toward the west (Strip side).*
- *Red Rock National Conservation Area is visible toward the west (Strip side), south (or left) of Mt. Charleston.*
- *Lake Mead is located toward the southeast, through the windows opposite the Strip side of the cabin.*

COMPARE AND CONTRAST (five-minute discussion)
Answers will vary.

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