

# Kingdom Quest

**Hop aboard your chariot on the Kingdom Quest ride to rescue the Princess!**

## Challenge

During your ride on Kingdom Quest there are beastly trolls and sneaky skeletons lurking.

Can you zap them with your LEGO blunderbuss?

The counter in front of your seat will count your zapping score!

Write down the scores:

Score 1: .....

Score 2: .....

Score 3: .....

Score 4: .....

Score 5: .....

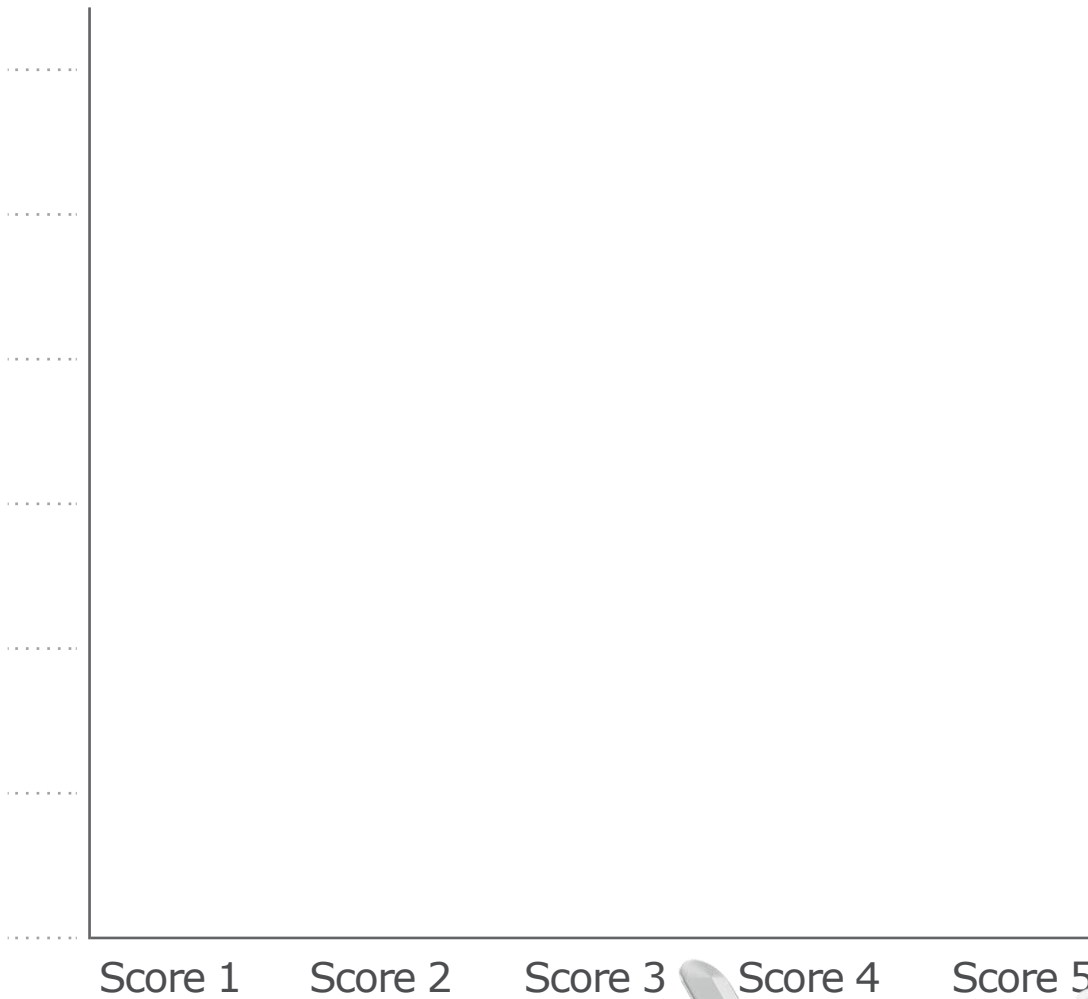
**Winner:** .....



# Kingdom Quest

## Back at school

Draw a graph that demonstrates the five scores



# Miniland Arizona

Explore MINILAND® – a miniature LEGO® replica of Arizona’s most loved buildings and landmarks built from over 1.5 million LEGO® bricks!

## Challenge

Look out for famous Arizona landmarks including Sky Harbor Airport, Cardinal’s Stadium, Chase Field and The Grand Canyon. Try and see what other interactive elements you can find in Miniland.



Which famous building has a copper roof and winged statue on top?  
.....

Which city is the LEGOLAND® Discovery Center located in?  
.....

Name five different modes of transportation found in Miniland.  
.....

What four instruments are featured at the concert in Downtown Phoenix?  
.....

What is the name of the river that flows through the Grand Canyon?  
.....


# Miniland Arizona



## Back at school

If you had to build a Mini Arizona out of LEGO bricks, what are the top 5 buildings, structures and natural formations you would choose to include?

Draw them below.



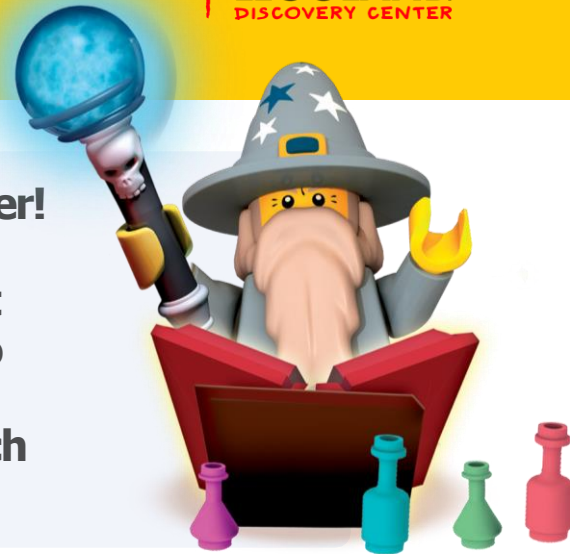
### Things to think about:

What buildings or formations have cultural or spiritual significance to Arizonans?

What buildings or national formations are easy to identify?

What buildings mark important historical moments in time?

# Merlins Apprentice



Welcome to Merlin's magical potions chamber!

Pedal the enchanted cart to become his next wizarding apprentice. Go faster and faster to conjure the sorcerer's spell and soar into the sky. Only the most powerful charms will reach the stars.

## Challenge

Merlin and his apprentice create magical positions to cast spells! Can you write a story about Merlin and his apprentice and a spell going wrong?

What material are the walls made of?

.....

How many picture frames can you count?

.....

What is on the bookshelves?

.....

Instead of lights there are:

.....

The weapons used as decorations are:

.....

# Merlins Apprentice

## Back at school

Design your own Merlin's magical potions chamber



Things to think about:

- What make your design look magical?
- What makes your design look like a potions chamber?
- What makes your design look like a home?
- What elements look like LEGO pieces?



# Shake Tables

Ever tried to build the strongest building you can from LEGO bricks?

Take on the challenge at our Earthquake Tables. Test the strength of your brick tower when the tables start to shake.



## Challenge

Try five different shapes and sizes and see which one lasts the longest.

Remember a good test means trying different shapes and styles!

Number of bricks wide		Number of bricks tall		Total bricks	Did it fall (Y/N)
<input type="text"/>	x	<input type="text"/>	=	<input type="text"/>	<input type="text"/>
<input type="text"/>	x	<input type="text"/>	=	<input type="text"/>	<input type="text"/>
<input type="text"/>	x	<input type="text"/>	=	<input type="text"/>	<input type="text"/>
<input type="text"/>	x	<input type="text"/>	=	<input type="text"/>	<input type="text"/>
<input type="text"/>	x	<input type="text"/>	=	<input type="text"/>	<input type="text"/>

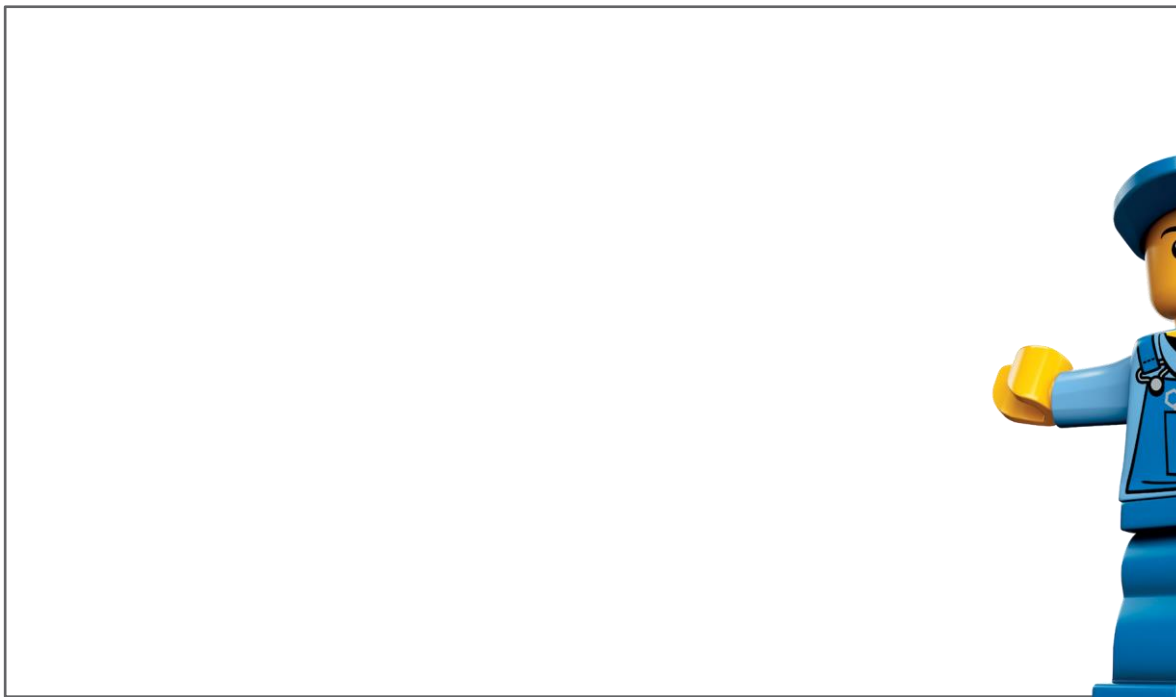
# Shake Tables

## Back at school

Draw a picture of a building that is structurally strong

A large, empty rectangular box with a thin black border, intended for drawing a structurally strong building.

Draw a picture of a building that is structurally weak

A large, empty rectangular box with a thin black border, intended for drawing a structurally weak building.



# Build and Test

Create an ultra-fast LEGO racing car at our Build & Test zone. Race your vehicle on the test track for the quickest time – will your car zoom across the finishing line first? Ready. Set. GO!

## Challenge

Build cars with your classmates and then race them on the ramp. Try and make sure everyone is building difference types of cars so you can test which cars are the fastest. Take note of the fastest times:

1. ....
2. ....
3. ....
4. ....
5. ....



# Build and Test

## Back at school

Tick which design features makes a 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

Review the data from your test and write down the top 5 things needed for a fast car:

1. ....
2. ....
3. ....
4. ....
5. ....



# Build and Test

## Back at school cont.

Draw the car featuring the five most important design elements:



# THE ULTIMATE LEGO® INDOOR PLAYGROUND



TEACHERS NOTES - LEVEL 3

## LEGOLAND Discovery Center Scavenger Hunt!



# Welcome

## Welcome to LEGOLAND Discovery Center Arizona

The Legoland Discovery Center Student Scavenger Hunt has been designed to add fun, focused and interactive learning while on a self-guided tour through the attraction.

The Scavenger Hunt incorporates some of the most engaging and interactive rides and play zones at LEGOLAND Discovery center. They can be visited in any order.

It is recommended that your class be divided into smaller groups – each with a teacher or parent teacher accompanying them.



# Kingdom Quest

**Kingdom Quest is a ride in which students and teachers board carriages and are transported through a series of interactive screens. Each person in the carriage is provided with a "blunderbuss".**



## Please note:

- Children must be able to walk to ride.
- Children between 3 ft and 4 ft 3 in must ride with an adult.
- Closed toe shoes must be worn to ride on Kingdom Quest.
- For safety, guests must be in good health without injuries that could be aggravated by the attraction. Expectant mothers, and guests with casts or broken/injured bones should not ride.

## Challenge

Students are instructed to zap the bad guys with the blunderbuss – this is done by pointing and shooting. A score appears on a screen in front of each student which tallies their success in zapping the bad guys.

At the conclusion of the ride, students must remember their score.

After exiting the carriage, students must write down their own score

Students are then tasked with writing down the scores of other people in their carriage.

## Back at school

Students are encouraged to think about the different ways they can represent this data and are to explore how the same data can be represented in different ways. They are challenged to represent the data in a grid form.

They can also reflect on whether Kingdom Quest was fair:

Did the position of the seating change how easy it was to shoot?

If students didn't listen to the instructions does that change how easy the challenge was? If they had visited LEGOLAND Discovery Center before, did that give an advantage?

# Miniland Arizona

**MINILAND is a miniature replica of Arizona featuring the state's most loved buildings and landmarks**

## Fun Facts

- All of the MINILAND models took a total of 5000 hours to design and build.
- MINILAND is made up of over 1.5 Million LEGO Bricks.
- There are over 3000 Minifigures



## Challenge

Students are challenged to explore Miniland and identify the activities located in specific locations, such as shopping, sport, and transport.

Q: Which famous building has a copper roof and winged statue on top?

A: Arizona State Capitol Building

Q: Which City is the LEGOLAND Discovery Center located in?

A: Tempe

Q: Name five different modes of transportation in Miniland.

A: Bike, Car, Airplane, Boat, Hot Air Balloon

Q: What four instruments are featured at the concert in Downtown Phoenix?

A: Guitar, Vocals, Bass, Drums

Q: What is the name of the river that flows through the Grand Canyon?

A: The Colorado River

## Back at school

Students are challenged to select 5 buildings, structures and natural formations to include in a Miniland Arizona. They are then asked to draw them.

Things to think about:

What makes a landmark culturally or spiritually significant?

Why would a building be created to acknowledge important moments in our history?

Is their Miniland Arizona culturally diverse? Does it consider different cultural groups?

How does a landmark represent people in the community?

# Merlin's Apprentice

**Merlin's Apprentice is a ride in which students sit in and rotate at speed. Students can choose to use the pedals for their chairs to rise up into the air. Stopping peddling will descend the chair.**



## Please note:

- Children must be a minimum of 3ft tall to ride.
- Children between 3ft and 4ft 3in must ride with an adult.
- Closed toe shoes must be worn to ride on Merlin's Apprentice.
- For safety, guests must be in good health without injuries that could be aggravated by the attraction. Expectant mothers, and guests with broken/injured bones, casts, moon boots or any other supportive braces cannot ride.
- Students MUST NOT undo their belt buckles and disembark until helped by a team member

## Challenge

On the walls surrounding the Merlin's Apprentice ride, there is a vinyl laminate design of Merlin's magical potions chamber, which is home to Merlin and his apprentice. As students ride round and around, they need to spot the details on the walls.

Q: What material are the walls made of?  
A: Wood / wooden panelling

Q: Instead of lights there are:  
A: Candles with LEGO flames

Q: How many picture frames can you count?  
A: 2

Q: The weapons used as decorations are:  
A: Axes

Q: What is on the bookshelves?  
A: books, skull, potions

Q: How many times can you see Merlin?  
A: 4: 2 in the frames, one with his wand on top of the ride and one the wall with his wand

## Back at school

Students are challenged with designing their own Merlin's magical potions chamber. Things to think about:

- What make their design look magical?
- What makes their design look like a potions chamber?
- What makes their design look like a home?

As an additional task, students could be tasked with creating a 3D model of Merlin's magical potions chamber.



# Earthquake Tables

The Earthquake Tables feature a build plate for building and a knob which students can turn to “shake” the table at increasing strength.



## Challenge

Students are challenged to build five different buildings of different shapes and sizes and then trial and test to see which type of buildings is the most structurally sound.

Students are tasked with writing down the number of bricks used in length and height, then use multiplication to determine the total number of bricks used

## Back at school

Students are asked to draw a picture of a building that is structurally strong and draw a picture of a building that is structurally weak.

They are encouraged to think about using these drawings to highlight the specific features that make a building strong or weak and should act as a visual representation of their learnings.

# Build and Test

**In the Build and Test area, students will find brick pits featuring car pieces including wheels, body pieces, windshields.**

They can then use two different ramps to test the durability and speed of their cars. Note one of the ramps features a button that lowers the start ramp, including a countdown. The counter at the base then calculates the speed of the fastest vehicle.



## Challenge

Students must build cars and race them against other students' builds. Students need to observe which cars win the race and critically consider what design features are more prominent in the winning cars. They are then asked to tick which features listed in their booklet help the cars go faster.

## Back at school

Students are challenged to review the data from build and test and determine the design features needed for a fast car. They are asked to list the top 5 features.

They are then tasked with creating a visual design of the car featuring the five most important design elements.