



The State Fair of
TEXAS
Curriculum

THE MIDWAY & GAMES

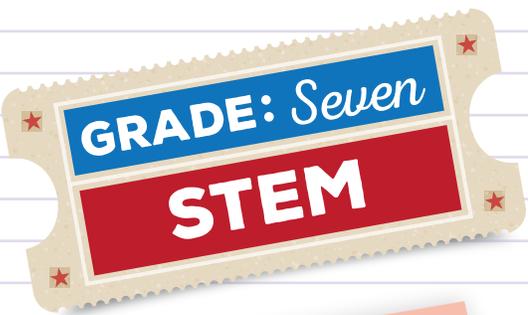
GRADE 7 STEM

RIDING OUT THE STORMS

DESIGNING THE ULTIMATE WEATHERPROOF RIDE



TEACHER



Riding Out the Storms Designing the Ultimate Weatherproof Ride

Texas plays host to some crazy weather! Normally, we just ride out the storm, but what happens to the Fair rides when it storms? How does the weather affect the Fair's bottom line?

In this lesson students will:

- ★ Identify how Texas weather might affect Fair rides.
- ★ Predict the amount of lost ticket sales that one stormy day might cause.
- ★ Look at weather patterns to estimate the number of days that Dallas might have inclement weather, during the Fair.
- ★ Create a design for an all weather ride at the Fair.

Standards

- ★ Math TEKS: 7.1(A), 7.1(C), 7.1(D), 7.3(B), 7.4(B), 7.4(D)
- ★ Science TEKS: 7.2(A), 7.2(C), 7.2(E), 7.8(A)
- ★ Art TEKS: 7.1(A), 7.2(B), 7.4(A)



Before You Go

Take a look at the weather in Texas, and identify weather that might be dangerous.

- ★ Discuss floods, lightning, and wind.
- ★ Suggested websites:
 - * [National Weather Service Storm Prediction Center](#)
 - * [Lightning Myths & Facts](#)
- ★ For this project, you'll be visiting the State Fair of Texas.
 - * Which rides do you predict would be most affected by changes in our weather?



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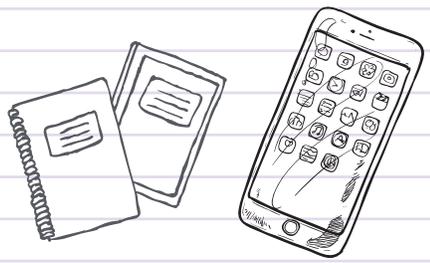
The Midway & Games

GRADE: Seven
STEM

Riding Out the Storms Designing the Ultimate Weatherproof Ride

Plan Your Route.

★ Begin at the Texas Star and move on to other rides.



Optional Materials to Bring

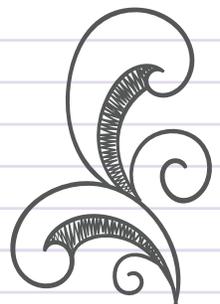
- ★ Smart Phone or Tablet
- ★ Pencil & Notepad
- ★ Sketchbook for Arts Connection

While You're There

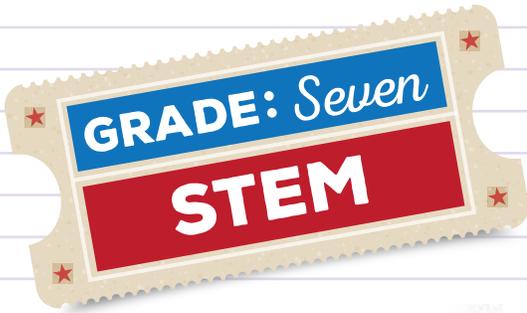
The goal of your visit is to decide which rides at the State Fair would be affected by weather. Then, you'll estimate how much money would be lost as a result of inclement weather.

FIND THE RIDE

- Walk around the Midway area and examine some rides.
- Write down or take pictures of at least three rides that you think would be affected by bad weather.
- Are there rides that would NOT be affected by bad weather?
- If so, what makes them immune to it?
- How did the designer take weather into consideration?
- Note the cost of the non-weatherproof rides and, for five minutes, keep track of the number of people that get on the rides each minute, using the table below.



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How many people are getting on each ride?

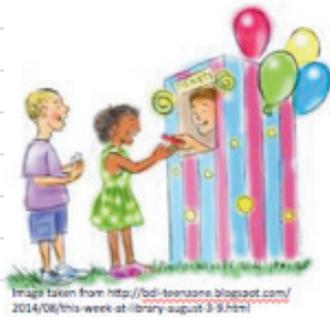


Image taken from <http://bd-somone.blogspot.com/>
2014/08/this-week-at-library-august-3-9.html

How many people are getting on the ride?

	Ride #1	Ride #2	Ride #3
Draw or Describe it!			
1 minute			
2 minutes			
3 minutes			
4 minutes			
5 minutes			

After the Fair

When you return to class following your State Fair visit, you will:

- ★ Work with a group to describe the impact of weather on the rides.
- * Can you make a prediction based on your observations?
- * View the weather forecast for Dallas during the months of September & October.
- ★ Use percentages to describe the forecasted weather during the State Fair of Texas this year.
- * Use the data collected from each ride to help you complete these Weather Activity Prediction Tables

Weather Activity Prediction Tables

Ride #1 **How does the weather affect the State Fair?**

Name _____

Description _____



How is this ride affected by the weather? _____

Approximate number of riders each hour _____

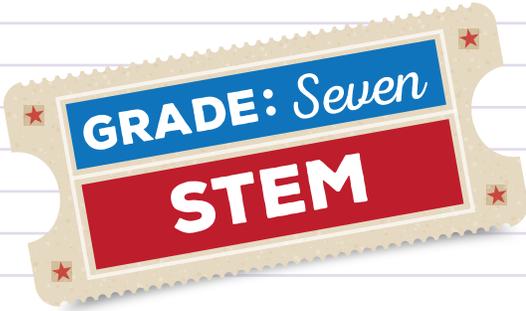
Approximate number of riders each day _____







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Weather Activity Prediction Tables

Ride #2

How does the weather affect the State Fair?

Name _____

Description _____



How is this ride affected by the weather?

Approximate number of riders each hour

Approximate number of riders each day

Weather Activity Prediction Tables

Ride #3

How does the weather affect the State Fair?

Name _____

Description _____

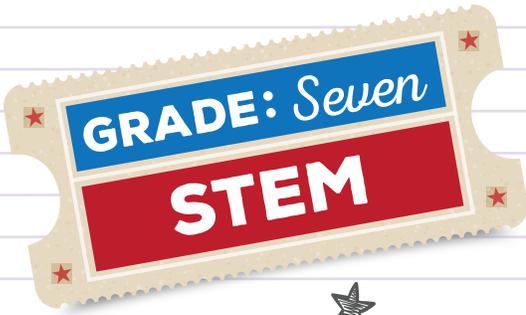


How is this ride affected by the weather?

Approximate number of riders each hour

Approximate number of riders each day





Riding Out the Storms

Designing the Ultimate Weatherproof Ride

Arts Connection:

Design Your Own Weatherproof Ride!

Put your design skills to work!

Think back to the rides that you saw while at the Fair.

- ★ Were there any that were weatherproof?
- ★ If so, how did the designer accomplish this?



Now, it's your turn to design a weatherproof ride for the Fair. How would you go about doing this? As you create some preliminary sketches, keep the following questions in mind:

- ★ How big should the ride be?
- ★ What materials should it be made of?
- ★ How would I attract visitors to this ride?
- ★ Where would people waiting in line stand? How would they be protected?
- ★ How will the ride be powered?
- ★ Use your imagination with this - don't hold back.

Remember, anything is possible!

Once you have created your design, write a description of it, to accompany your work.

- ★ Describe how it works, what it is made of, and how you have made it weatherproof.