

BIG TEX GRADE 5 STEM

HOW IT'S MADE: BIG TEX EDITION



GRADE: Five



How It's Made **Big Tex Edition**





In this lesson students will:

- ★ Design and create a model of Big Tex that represents various cultural groups in the State of
- ★ Discover the meaning of ephemeral art, and analyze different examples.
- ★ Create their own ephemeral art, based on their experience at the State Fair.

Have you ever wondered, "Who is Big Tex?" Was he a real person, once? Is he meant to represent a real person, or a group of people? In this lesson, students will have the opportunity to explore how Big Tex was made, who he represents, and redesign him if they choose.



- ★ Math TEKS: 5.1(A), 5.1(B), 5.1(C), 5.3(A) ★ Science TEKS: 5.3(B), 5.3(C)
- * Art TEKS: 5.1(B), 5.2(C), 5.4(A) ★ Social Studies/ELAR Connection: since this lesson invites 5th graders to visit Big Tex and explore some material similar to that in the "Celebrating Symbols" lesson, consider teaming up with the SS/ELAR teacher and doing both!

Before You Go

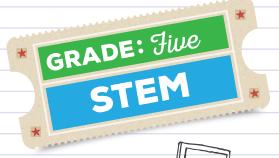
- * Study this fact sheet on Big Tex.
- * Read this article on what caused Big Tex to burn in 2012.
- ★ Discuss this article about Big Tex's clothes.
- * About how much money do you think it costs to clothe Big Tex?
- * What materials are currently used to clothe Big Tex?
- * Why are these materials currently being used?



Plan Your Route.

★ Go directly to Big Tex Circle.





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Optional Materials to Bring

- * Smart Phone or Tablet
- * Science notebook or paper
- ★ Pencil & Notepad
- * State Fair of Texas map
- * Sketchbook for Arts Connection



While You're There

The objective of your visit is to collect information about Big Tex from your own point of view, as well as from the perspective of the people who are part of the State Fair. Think about how you will design and create a model of Big Tex that is representative of different people and groups in our State.

VENDORS' POINT

OF VIEW

- ★ Interview different vendors at
- Ask them what the State Fair of Texas and Big Tex mean to
- Ask vendors about the products (food, clothing, and other goods)
- they are selling. How much do their products
- What materials do they use to create these products, and how much do they cost?
- How are the products they create representative of Texas and Texans?

YOUR POINT OF VIEW Observe Big Tex as he moves and

- Make notes, take pictures, or
- record video of his movement and speech.
- Make observations about other traits of Big Tex: how is he bolted to the ground, what he is wearing, etc.





Plan Your Route.

- ★ Continue straight on Lonestar Blvd.
- * Take a right on Nimitz Drive to go to the Creative Arts Building.
- ★ There you will find a sculpture made of butter!
- * When finished, explore the rest of the Fair to look for ephemeral art.





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After the Fair

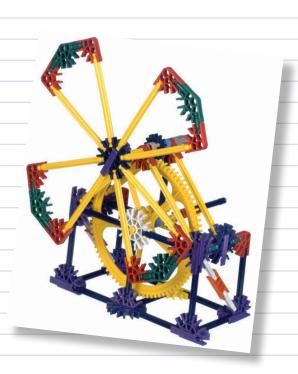
When you return to class following your State Fair visit, you will use your own ingenuity and a gears kit similar to K'Nex Education to collaborate with another scientist (classmate) to recreate a scale model of some of the mechanics inside Big Tex.

- ★ Careers in Science Class Discussion: Scientists had to be recruited to help redesign and reassemble Big Tex after he burned. Engineering scientists also had to be contracted to make updates to his mechanics throughout the years.
- ➤ Putting Your Research to Work: Use the information from your interviews to design a new multicultural outfit for Big Tex that represents everyone across the state.
 - * TEACHABLE MOMENT: what is multicultural; what cultures would you like to represent; and why?
 - * What materials will you use for your outfits?
 - * How much will your materials cost?
 - * How much will it cost for you to design and create the outfit?
 - * Draw a picture; then build a miniature model of Big
 Tex wearing your new outfit.

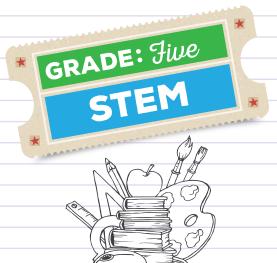
ARTS CONNECTIONS

- Travel through the Arts and Crafts building and look for examples of ephemeral, or temporary, art.
- In this building you will find a sculpture made of butter! Do you think this would be considered ephemeral art? Why
- ephemeral art? Why or why not?

 Look at the other art in the
 building do you see any
 examples there?
- Keep on the lookout for more examples of temporary art at the
- Don't forget to sketch or list the examples you find along with the materials that were used.





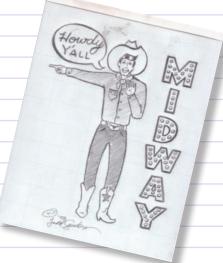


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Sharing Your Design

★ When their Big Tex model is complete, the groups will present how they think Big Tex works.



Arts Connection: Here Today, Gone Tomorrow!

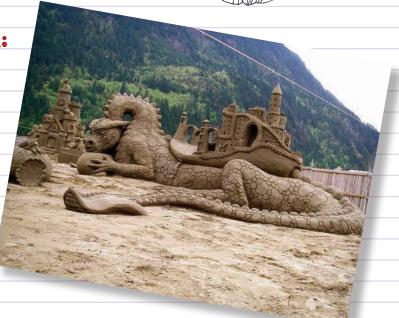
Ever wonder how artists feel if or when their art is destroyed? When Big Tex caught fire, it definitely wasnot planned. Therefore, it was pretty devastating. However, did you know that some artists create their art actually knowing and planning for it to be destroyed? This type of art is called "ephemeral art". Ephemeral means temporary, so this type of art would be considered temporary art. Think back to all of the different types of art that you have made - have you ever made ephemeral art?



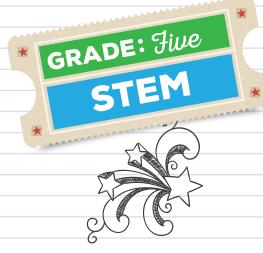
In this lesson, students will:

- ★ Discover the meaning of ephemeral art and analyze different examples.
- ★ Use their knowledge of ephemeral art to explore the State Fair and look for examples.
- ★ Create their own ephemeral art based on their experience at the State Fair.











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Before You Go

- * Hold a discussion about ephemeral art.
- ★ Explain to the students that ephemeral simply means "temporary".
- ★ Ask students if they can think of any examples of art that might be made to be temporary
 - * Hints: chalk art, drawings on a dry erase board...
- ★ Visit this link to view some amazing examples of ephemeral art.
 - * Included are Earth Art, ice sculpture, and chalk drawings.
 - * As you look at these examples, talk to the students about the way the artists have incorporated color, unity, and balance in their work.
- ★ Instruct students to look for examples of ephemeral art while they are at the State Fair.
 - * Ask them to sketch or write down these examples and be sure to include the medium that the artist used for the work.

While You're There

★ See the main lesson for instructions.

After the Fair

- ★ When you return to class following your State Fair visit, you will create your own ephemeral art, based on your experience at the fair!
- ★ Look back to the examples you sketched or listed during your visit.
- ★ You can also use the examples you talked about in class, for reference.
- ★ Don't forget to think about things like color, balance, and unity.
- ★ Below is a list of some possible media you could use to create your ephemeral artwork:
 - * Food
 - * Ice
 - * Chalk
 - * Things from the Earth (sticks, leaves, etc.)
 - * These are only examples. If you think of something else, go for it!