



*The State Fair of*  
**TEXAS**  
*Curriculum*

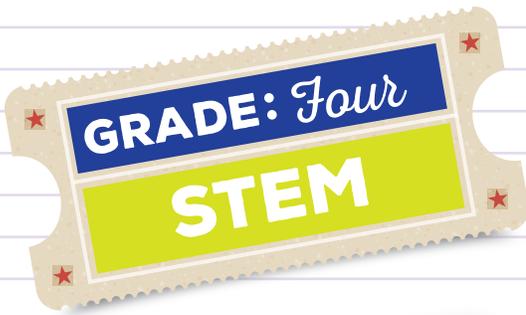
**BIG TEX**  
**GRADE 4 STEM**

ENERGETIC TEX  
ART ON THE MOVE



# TEACHER

# BIG TEX



## Energetic Tex Art on the Move

### In this lesson students will:

- ★ Observe the different types of energy present in Big Tex and around the State Fair of Texas.
- ★ Compare and contrast Big Tex's weight and other characteristics with those of different statues.
- ★ Define kinetic sculpture and the different ways that artists create these types of sculptures (including those at the State Fair - Big Tex in particular).
- ★ Create their own kinetic sculpture based on their experience at the Fair.

Big Tex is a type of kinetic sculpture. In this lesson, we will explore different types of kinetic art, what makes them tick, and ultimately, make our own!

### Before You Go

- ★ Read this fact sheet on [Big Tex](#)
- ★ Read this article on what caused [Big Tex to burn in 2012](#)
- ★ How does Big Tex move? Check out this [article and slideshow](#) to find out!
- ★ See Arts Connection at the end of this lesson for more background info.

### Standards

- ★ Math TEKS:  
4.1(D), 4.2(C)
- ★ Science TEKS:  
4.6(A), 4.6(C)
- ★ Art TEKS:  
4.1(A), 4.2(B)

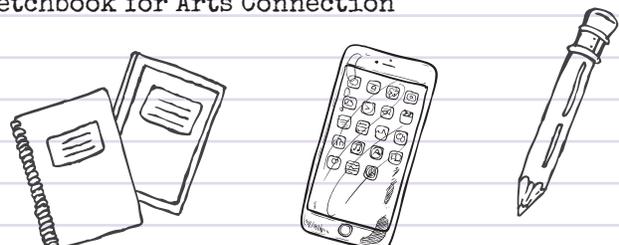
### Plan Your Route.

- ★ Go directly to Big Tex Circle



### Optional Materials to Bring

- ★ Pen or Pencil
- ★ Science Notebook or Paper
- ★ Smartphone, Tablet, or other device
- ★ Sketchbook for Arts Connection





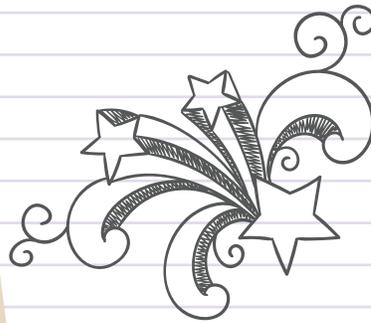
## Energetic Tex Art on the Move

### While You're There

The objective of your visit is to observe Big Tex as he goes through his motions! While you are there, sketch, take pictures or take a video of the different types of energy you observe at Big Tex.

#### KEEP IT MOVIN'!

- ★ Did you know when Big Tex was redesigned in 2013, he was engineered to have 11 movements?
- ★ Can you figure out what they are? Keep track of his movement in the diagram below.
- About how long does it take Big Tex to go through each of his motions?
- What type of energy does Big Tex use when he is moving?



#### ARTS CONNECTION

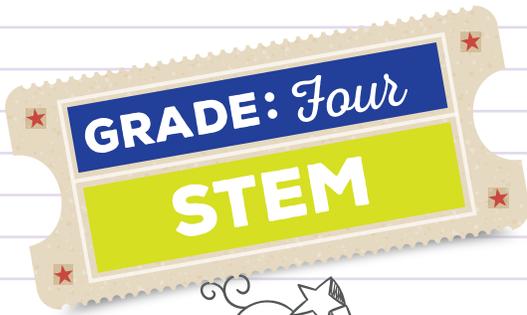
- ★ Use these questions to help you on your art project later.
- Do you think Big Tex would be considered a kinetic sculpture? Why or why not?
- Pay attention to all of the interesting objects that are at the Fair. Are there any objects that would be considered kinetic sculpture?

## Energetic Tex

What types of energy do you observe here?

Can you keep track of Big Tex's 11 movements?

1.	7.
2.	8.
3.	9.
4.	10.
5.	11.
6.	



## Energetic Tex Art on the Move

### Plan Your Route.

- ★ Continue straight on Lonestar Blvd and take a right on Nimitz Drive to go to the Creative Arts Building
- ★ Did any of the artists in the Creative Arts Building create kinetic sculptures? If so, what makes them kinetic?



### After the Fair

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

- ★ Break into three different groups, each group will be the specialist for one type of energy: Mechanical, Sound, and Electrical.
  - \* The group members will act as the scientific specialists on their type of energy. They will briefly do further research, and then present to their classmates how Big Tex uses their type of energy to add to the fun at the Fair.
  - \* After presentations, turn back to the article on the cause of the fire. Use this information as a segue into talking about circuits.
- ★ The new Big Tex weighs 25,000 pounds. This is 19,000 pounds more than the original statue!
  - \* Research Opportunity - Why did Big Tex's creators increase his weight? What does it have to do with energy?
  - \* Making Comparisons - Compare Big Tex's weight to the weights of these other major statues!
    - Write comparison sentences to compare the weight of each statue to the weight of Big Tex:

#### Examples

$$15,010 < 15,100$$

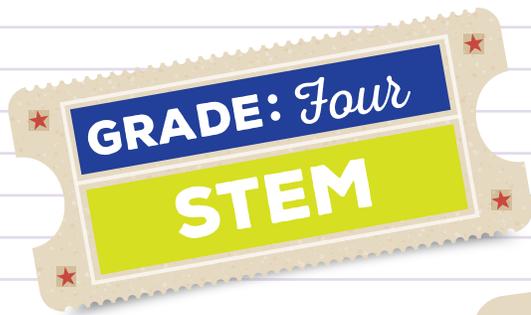
$$728,384 > 728,348$$



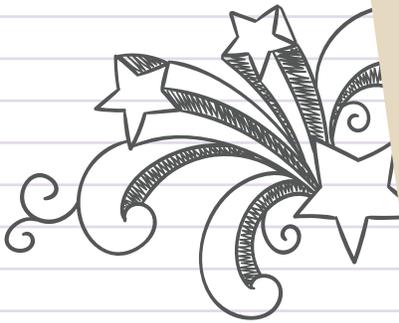
- What do each of these statues have in common with Big Tex?
- How are each of these statues different from Big Tex?
- What conclusions can you make about the weight of a statue?

# TEACHER

# BIG TEX



## Energetic Tex Art on the Move



### ARTS CONNECTION

- ★ In this lesson, students will:
  - Define and explore examples of kinetic sculpture, including Big Tex himself
  - Create their own kinetic art



## Before You Go

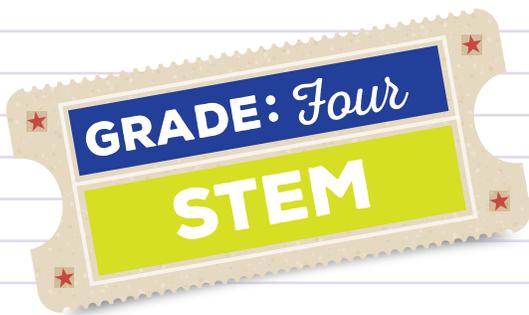
Prior to visiting the Texas State Fair conduct a class discussion about kinetic sculpture:

- ★ Kinetic sculpture contains movement and depends on motion for part of, or all of its effect.
  - \* This motion can come from many things: wind, a motor, or even the observer are some examples.
  - \* Inspiration for kinetic sculpture can come from anywhere and the art can be made from an unlimited source for materials.
  - \* One of the first artists to make this type of sculpture famous was Alexander Calder, who created the first sculptural mobiles.
- ★ Here is a [short video](#) of some of his artwork.
  - \* Search his for works that you may want to show your students: <http://www.calder.org/>

- \* Ask the students some of the following questions regarding his works:

- What do you see?
- How is this art different from other art that you have seen?
- What makes these kinetic?
- How does this art make you feel?

Instruct the students to look around when they are at the fair and take note of any kinetic sculptures that they see, in addition to Big Tex, and sketch or make a list of these sculptures.



## Energetic Tex Art on the Move

### While You're There

When you arrive at the State Fair, go and see Big Tex.

- ★ Do you think he would be considered a kinetic sculpture? Why or why not?

Look all around you and pay attention to all of the interesting objects that are at the Fair.

- ★ Are there any objects that would be considered kinetic sculpture?

Make your way to the Creative Arts Building.

- ★ Did any of the artists there create kinetic sculpture?
  - \* If so, what makes them kinetic?



### After the Fair

When you return to the classroom, inspired by what you have seen at the State Fair: create a mobile, or other type of kinetic sculpture that would reflect your experience!

Think back to what you discussed in class and the examples that you looked at. There are many ways to create your sculpture - it's time for you to get creative!

- ★ It could be as simple as taking a wire hanger and hanging objects or drawings from string attached to the wire.
- ★ Think about what makes something kinetic - it is moved by wind, a motor, or the viewer.
- ★ Look back to your sketches for inspiration as well.
- ★ Have fun with this!

### Website Links

- ★ Big Tex Fact Sheet <http://bigtex.com/bigtex/>
- ★ Article - Big Tex Burns in 2012 <http://goo.gl/5Xt441>
- ★ Article - How Does Big Tex Move? <http://goo.gl/S24eqr>
- ★ Video - Alexander Calder <https://goo.gl/VOSJjo>
- ★ Alexander Calder website <http://www.calder.org/>