



#### Friday, May 1

2:30pm

Sci Girls "Space Squad" - 4<sup>th</sup> thru 8<sup>th</sup> grade

Texas SciGirls Katya, Marlana, Angela and Eloyda are over the moon! Teaming up with NASA materials engineers, they create their own water bottle insulators, bringing space science to life on Earth.

After watching this episode, choose from the following questions and/or tasks to extend your learning

#### **Question Box 1**

- What are the key details in this program?
- What is the central message in this program? Explain?
- What made the girls decide to create water bottle insulators?
- What did they need to consider?
- How did that bring space science to life on Earth?
- What did you learn after watching this program?
- What is the program's purpose? How do you know?
- Was the final product successful? Provide evidence from this episode to support your answer.

# **Question Box 2**

- Would you have done something differently when creating a water bottle insulator?
  What would you have done?
- What skills do you have that would make you an important part of a team?
- What was one section of this episode that stood out for you and why?
- What unanswered questions do you still have about this episode?
- What do you think you learned from this program?
- How much did you know about the subject before we started?

# Box 3 (Tasks)

• Describe the skills the girl's needed when creating a new invention. What does it take to invent something for a particular purpose?

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- Write out your thoughts on what you think a water bottle insulator should have.
- Draw a model of the bottle insulator. Compare your drawing to the Sci-Girls' creations.
- Make a model of how the bottle insulator, and describe the process of insulation.

#### **Box 4 (Enrichment)**

- Describe the design process that the girl's used when designing the insulator.
- Describe some of the challenges the Sci-Girls had and how they overcame those challenges.
- Research insulation and describe the process.
- Describe the materials and their purpose they are used for in the bottle insulator.

# **Box 5 (Extend/Real-Life)**

- Draw a picture of the bottle insulator and make an advertisement (print or video) that would attract interested buyers.
- What does it take to be a designer? Find out more about careers in design technology.