Howdy Future Engineers!

Welcome to the resource website for the book - *Engineers Needed: Help Tamika Save the Farm*.

The purpose of this book is to provide guidelines and instructions for students to follow an adventure into the world of engineering and farming. Students will be guided through some basic information about farming, irrigation, conservation, and environmental considerations and then directed on how to continue their learning using their own investigative skills. There are links to additional information online, projects, and a WebQuest to guide their adventure.
To view the content linked to the below QR codes you will need to install a QR reader onto a smart phone or smart device. Be sure to "frame" the QR code in the window of your QR reader so that the data can be read most effectively.

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Cricut - 2D Cutter Website
http://www.cricut.com/home/

Recommended Materials
Texas Education Agency (TEKS)
http://tinyurl.com/oxy4fy

Crafts U Love - More 2D Cutter Designs
http://www.craftsulove.co.uk/silhouette.htm

Chapter 1
Community Science Action Guides - How much water are you using?
http://fi.edu/guide/schutte/howmuch.html

EPA - Learn about Water
http://www.epa.gov/WaterSense/kids/index.html

Chapter 2
USDA - Calculate your energy use.
http://ipat.sc.egov.usda.gov/
You Tube Video - The story of Agriculture and the Green Economy
http://youtu.be/twGev010Zwc

EPA - The water cycle
http://tinyurl.com/kqu2l

National Institute of Environmental Health Science - Recycling Games
http://kids.niehs.nih.gov/index.htm

Cup and Other Activities:
http://tinyurl.com/kgdu5tn

Chapter 3

Irrigation Museum - 1876 sprinkler invention
http://tinyurl.com/lgeaana

Irrigation Museum - 1880 California orange grove
http://www.irrigationmuseum.org/photos/IA-005.jpg
Chapter 4

Infiltration Model:

EPA - Water Treatment Plant
Chapter 6

Water Secure Water Island Game
http://tinyurl.com/7yokls9

Science Fair Adventure - Desalination Experiment
http://tinyurl.com/7s4nuc

Chapter 7

Farm Energy - Success Stories
http://farmenergy.org/success-stories
Activities

Print, Fold, or Click

**Chapter** Origami Cup

1

- Print: Instructions (PDF)
- Print: Cup Pattern (PDF)

**Chapter** Webquest

3

- Print: Irrigation Museum Webquest (PDF)
- Link: Irrigation Museum Webquest (URL)

"Y" Project

- Print: Instructions (PDF)
- Print: "Y" Pattern (PDF)

**Chapter** Infiltration Model:

4
2D Files (Silhouette Cutter)

To view these files you will need the Silhouette software installed on your computer.

Download here: http://www.silhouetteamerica.com/software

Chapter Origami Cup
1
   Silhouette file: Origami Cup

Chapter "Y" Project
3
   Silhouette file:"Y" project
About the IITTL

A Product of IITTL (Institute for the Integration of Technology into Teaching and Learning)

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