

MYSTERY #4 MIRACLE OF WATER

2 - 5th Grade Teacher Guide



This teacher's guide is broken into different sections with suggestions of how to use the reader in the classroom and provide ideas on how to extend the learning of your students. A PDF version of this teacher guide with active links can be found at kansascornstem.com under Mystery Corn Reader.

Reader QR Code Links

If your students are unable to use QR codes in the classroom here are the links to share the videos in alternative ways.

- How Farmers Conserve Water: https://www.youtube.com/watch?v=R1Jo-qCOKrc
- What is an Aquifer: https://www.youtube.com/watch?v=3AsGbz-k3W4
- Irrigation Technology: https://www.youtube.com/watch?v=O-w6w3aQgXA
- The Water Cycle: https://www.youtube.com/watch?v=wiMaRFC-ou8
- The Water Cycle: Desalination Experiment: https://www.youtube.com/watch?v=MQGndel9Jvc

Grades 2-5

This reader can be used in small groups or whole group for reading or science.

Outcome

- Students will be able to understand the Water Cycle.
- Students will have knowledge of the targeted vocabulary words.
- Students will have knowledge about how the Earth's water is used.
- Students will be able to name the different parts of the Water Cycle.

Vocabulary Words

Introduce these words before you begin reading. Ask students if they have heard or recognize the words before. Then, read the definitions and talk about them as a class. Do more of the students recognize the words now? See if students can use the vocabulary words in sentences.

- Freshwater: water not of the sea water.
- Precipitation: rain, snow, sleet, or hail that falls to the ground.
- Evaporation: the process of turning from liquid into vapor.
- Conserve: protect from harm or destruction.
- Conservation: prevention of wasteful use of a resource.
- Irrigation: the supply of water to land or crops to help growth, typically by means of channels or sprinklers.

Front Cover

Allow time for students to share their thoughts on the questions that were asked. Teachers can write down their ideas on the board so it can be revisited after reading.

Find more fun and interactive resources at kansascornstem.com





Inside

- When you come to a vocabulary word, take the time to stop and redefine the word.
- After reading the content, revisit what students brainstormed from the front cover questions. Were any of their ideas mentioned in the reading?

The Water Cycle

- Have students watch the farmer Bill video, to learn more about the Water Cycle.
- This can be loaded to Google Classroom,
- Pass out the Water Cycle worksheet while students watch the video to write down information they learn.

Water Cycle and Desalination Experiment:

- This activity is a great way for students to visually see the water cycle and how salt water can become
 fresh water.
- Watch the Farmer Bill instruction video, (just the teacher) before setting up the experiment.
- As a class group set up the experiment and then place the bowl somewhere, preferably in the sun, for a whole day or longer.

Additional Kansas Corn STEM Resources

This reader can be used as a stand-alone activity, or you can pair it with other Kansas Corn STEM offerings.

- **Free Education Kit and Lesson** The best resource to pair with this reader is one of our corn lessons that comes with a free education kit. The kit contains all the supplies needed to conduct a series of lessons that meet NGSS, are inquiry-based and hands-on. No training or prior knowledge about corn is needed to teach these lessons. Request your free kits at https://kscorn.com/request-materials/
- Lesson Library
 With a lesson library of over 90 lessons and labs, you can find numerous resources
 to use. Make sure to check out our TEACH-FLEX lessons that use easy to find classroom materials.
 https://kscorn.com/lesson-library/
- **Breakout Box Challenge** Challenge your students to learn more about corn by using a breakout box. A breakout box challenge is available for each grade level, K-5 and is a great way to also assess learning. Challenges are available online or for physical breakout boxes. Check out the challenges at https://kscorn.com/topic/breakout-box/
- **Guest Speaker** Request a guest speaker to visit the classroom and expand learning about ethanol and corn. https://kscorn.com/guestspeaker/