**November 11, 2019**

Another in the series of Illinois Agriculture in the Classroom non-fiction text examples to be used in your classroom. Remember, these will be available every MONDAY afternoon that *FarmWeek* is published during the school year.

Questions about this can be directed to Kevin Daugherty, Education Director of Illinois Agriculture in the Classroom at [kdaugherty@ilfb.org](mailto:kdaugherty@ilfb.org).

\*\*Reminder these questions are designed to use with the on-line version of *FarmWeek.*

<http://digital.farmweeknow.com/app.php?RelId=6.2.2.7>

Note, by request of teachers we have included the answers to the questions immediately following the questions on a separate worksheet.

*Teachers want to be sure to get this in a timely fashion? Sign up for your copy to be directly emailed at* <http://www.agintheclassroom.org/FWArticle/fwarticle.shtml>

GROWMARK responds to propane infrastructure issues

**NAME:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ CLASS PERIOD\_\_\_\_\_\_**

**Directions:** Please use the online version of *FarmWeek.* <http://digital.farmweeknow.com/app.php?RelId=6.2.2.7>

Use the article titled:

**GROWMARK responds to propane infrastructure issues**

1. Identify the sources. What is GROWMARK? What is propane?
2. Name the three reasons GROWMARK provides customers with propane.
3. What caused the significant spike in propane demand this week?
4. Explain what you think Carol Kitchen means when she says that “Pipeline infrastructure is maxed out and can never fully support excessive demand periods like now.”
5. What could happen when Illinois farms need to get propane and that material comes from Conway, Kansas? Explain your assumption.
6. Now is a time to think about your energy usage. How is your home heated? How is your school heated? Share your finding.

Answer Key

1. GROWMARK is an agricultural cooperative in the Midwest. Founded in Illinois, it is locally known as the FS System. GROWMARK and FS provide agricultural goods (energy, crop protectant, seeds, etc.) to farmers. Propane is a by product of natural gas processing and petroleum refining. It can be used as fuel. Homes can be heated by it, cars can be converted to drive with it, and you might see ‘white tanks’ on a gas grill-those are filled with propane.
2. GROWMARK provides propane to farmers to dry their grain, to heat livestock facilities and for home heating.
3. The demand was due to the colder temperatures and late harvest. Because corn was planted late, and harvested late the ‘natural’ drying that typically occurs in September (warm temps, windy conditions) didn’t dry the corn in the fields. Farmers now have to dry the corn for storage and sale.
4. Answers will vary, but transporting propane from the site of origin to where it needs to be is part of the ‘pipeline’. During cases of high demand like right now when we need propane for agriculture and consumer usage, it is hard to keep enough propane at various sites.
5. Answers will vary, but the idea of supply and demand is worth discussing. Because the demand is high and the supply is low, price will go up, additionally transportation costs to transport propane over 600 miles would need to be factored in.
6. Answers will vary, but electric, natural gas, propane and even geo-thermal heating could all be options. With electricity, how does that electricity get into place? Is it Wind generated? Solar generated? Nuclear Generated? Coal generated?