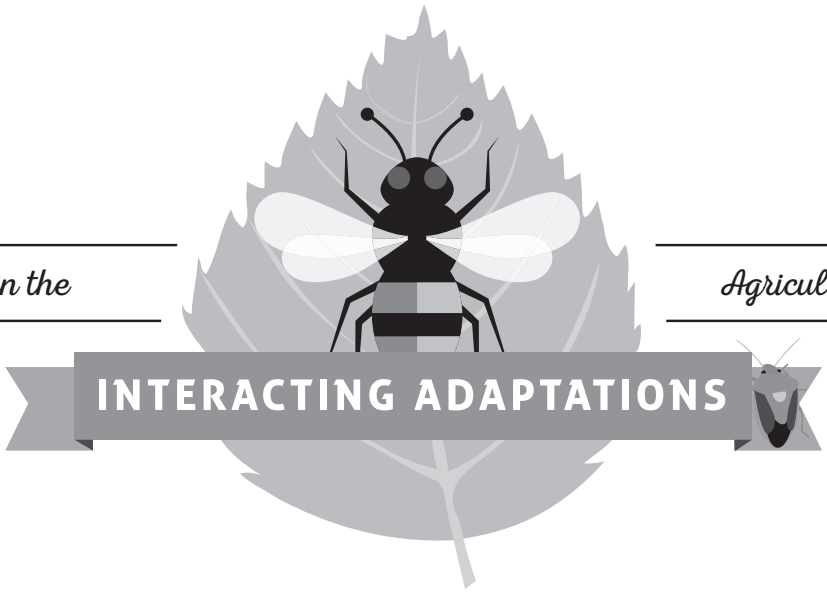
Name _____ Date _____

Trade-Offs in the *Agricultural Industry*



1. Examine the distribution of the sticky notes on the posters around the classroom and fill in the blank for the following sentence (**CIRCLE ONE**).

   When an adaptation to the effects of climate change is put in place, it **DOES / DOES NOT** affect other parts of agriculture.

   a. How does the distribution of sticky notes show this?

   b. What does this tell us about the way actors in agriculture should work together to adapt to the effects of climate change?

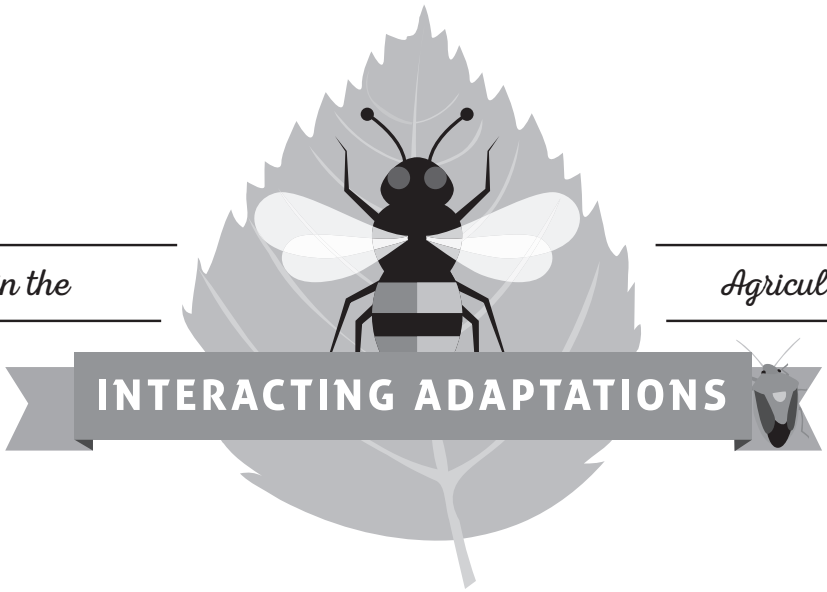
2. Think back to the farmers in Tulare County, CA. If you were one of these farmers, knowing what you know now, would you still tap into groundwater as an adaptation to climate change? (**CIRCLE ONE**)

   YES **NO**

   a. Why or why not?

   b. What could have been done differently to increase sustainability of water resources?

ANSWER KEY



Trade-Offs in the *Agricultural Industry*

INTERACTING ADAPTATIONS

1. Examine the distribution of the sticky notes on the posters around the classroom and fill in the blank for the following sentence (**CIRCLE ONE**).

   When an adaptation to the effects of climate change is put in place, it **DOES** / **DOES NOT** affect other parts of agriculture.

   a. How does the distribution of sticky notes show this?

   Most posters have multiple sticky notes (or posters have different colored sticky notes on them).

   b. What does this tell us about the way actors in agriculture should work together to adapt to the effects of climate change?

   Finding and implementing effective adaptations are the responsibilities of all actors. Adaptations are interconnected, and agricultural actors should work together to find solutions to the issues related to all of the major climate impacts. When an adaptation for an impact is implemented, it can have an effect on other impacts, and the trade offs should be considered by all actors.

2. Think back to the farmers in Tulare County, CA. If you were one of the farmers, knowing what you know now, would you still tap into groundwater as an adaptation to climate change? (**CIRCLE ONE**)

   student answers will vary

   YES / **NO**

   a. Why or why not?

   Reasons for answering "yes" could include: there is not enough surface water; I need to water my crops in the short term; my neighbors are doing it, and I do not want to lose out on my share; etc.

   Reasons for answering "no" could include: we will run out of groundwater; we should stop the subsidence (or sinking) of land; I may be taking more than my fair share of water; drilling for water is expensive

   b. What could have been done differently to increase sustainability of water resources?

   Alter planting and harvesting schedules, develop efficient irrigation systems and excess water systems, develop/plant drought-resistant crop varieties, implement other water conservation methods (watering schedules, incentives), monitor soil moisture and water only when needed