

Name: _____

Period: _____ Date: _____

Science Article

1. Just reading the title of this article, what do you think the article will be about?

2. What do you already know about this subject? (Brainstorm and include *anything* that comes to mind. This part doesn't need to be in complete sentences.)

3. You'll now be given the article itself. Look at any diagrams, photos, illustrations. Read the captions for these. Scan the first sentence of each paragraph. Now, briefly describe what you think the article is about.

4. Now read the article. As you read the article, make a list of words you are unfamiliar with. Write down what you *think* they might mean from the context (how they're used in the sentence). Then look up the word in the dictionary. List at ***least*** one word, but no more than three.

WORD	MEANING FROM CONTEXT	DICTIONARY MEANING

5. In just one or two sentences, summarize the main idea(s) of this article (What happened? What experiment was conducted? What was observed? What was learned? Why is it important).

Titan's Lakes: Evidence of Liquid on Saturn's Largest Moon

1. What compound do scientists believe may “cycle” on Titan in a similar way to how water cycles on the Earth?
2. The average temperature on Earth is around 15 EC. The melting point of water is 0 EC, and the boiling point is 100 EC. What phase would you expect to find most of the water on Earth in?
3. The hottest temperatures found on the Earth are around 50-55 EC, nowhere near the boiling point of water, and yet water exists in its gaseous phase as well (even in places where the temperatures are near 0 EC). Why?
4. The melting point of methane is -182 EC, and the boiling point is -161.6 EC. Given the temperatures mentioned for Titan in the article, what phase would you expect to find most of the methane in?

Would you expect to find methane in other phases as well? Why or why not?

5. The atmospheric pressure on Titan is around 1.6 atm. Would you expect this to shift the methane more towards solid or gas?

Given the information from the article and this sheet, if you landed on Titan, what phases of methane do you think it might be possible to encounter?