



# Let's Make Methane!



As the main component of natural gas, methane is one of the most abundant organic compounds on earth. When at room temperature and standard pressure, methane is colorless and odorless (just like natural gas). Here's how you can make some methane of your own:

### Materials needed:

- Empty jar
- Duct tape
- 1/4 cup of soil
- Balloon (not inflated)
- Spoon
- Raw vegetable scraps (like carrots, apple or potato peels, broccoli stems, lettuce or greens)

### Directions:

1. Mix the scraps and soil together in the jar.
2. Stretch the neck of the balloon over the mouth of the jar and secure it with duct tape.
3. Put the jar someplace warm, like near a window in your home or classroom.
4. Measure the circumference of the balloon each day for about a week.



### Analysis:

1. How long did it take for your balloon to fill with methane? \_\_\_\_\_

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2. Did the daily temperature and amount of sunlight affect the balloon size in any way? \_\_\_\_\_

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3. What happened to the mixture of soil and scraps in the jar? \_\_\_\_\_

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4. How is methane similar to natural gas? How is it different? \_\_\_\_\_

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5. What are some of the ways people are able to capture methane? What are its uses? \_\_\_\_\_

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6. Research and describe below the chemical compounds for methane and natural gas. \_\_\_\_\_

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