



"Don't Quench the Spirit!"

The Carbon Dioxide and Candle Devotion

Bible Verse

"All the believers were one in heart and mind. No one claimed that any of their possessions was their own, but they shared everything they had." Acts 4:32

"We cared for you. Because we loved you so much, we were delighted to share with you not only the gospel of God but our lives as well." 1 Thessalonians 2:8

Main Spiritual Point

"It is lame to put out someone else's flame! Don't be rude with your attitude"

Science Concept

Carbon Dioxide (CO₂) is a clear, colorless gas that is heavier than air. Adding vinegar to baking soda creates carbon dioxide gas. Flame needs three important elements: heat, oxygen and fuel. If one of these elements is removed, the flame will go out. Because carbon dioxide is heavier than air, it can be poured down a ramp. The gas itself will be unable to be seen, but if a lit candle is placed at the bottom of a channeled ramp, the gas will extinguish the flame of the candle as oxygen gas is displaced and moved.

You will need:

- Candle
- Matches
- Baking soda
- Vinegar
- Beaker or large pouring pitcher
- Metal ramp or corner piece to siding

Difficulty & Duration:

Moderate: 15 minutes

Tips For Success:

- If the room you are performing the demonstration in has a ceiling fan, a slight breeze or a flow of air, this will greatly affect the ability to pour carbon dioxide. Do a test run in the area you are demonstrating to get a feel of the environment and how it will respond in a live setting.
- Be careful to only pour the gas and not tip the beaker or pitcher too much and accidentally pour some of the liquid.
- Use an adult volunteer or helper to hold the candle. In addition, consider making a protective cardboard candle holder to catch any dripping wax. (Think "Silent Night candle-light service")

The Carbon Dioxide & Candle Devotion: What to Say to Kids

1. Let's pretend your neighbor had two freshly baked pies and was going to share one with you! One pie was made with freshly picked fruit and was warm and crispy! The other pie was made with dirt from the backyard, rocks taken from the street and the crust was a little moldy and old. Which pie would be the best? Which pie would you want?

2. Let's think about our invisible attitudes. How are our invisible attitudes sometimes like a dirt and rock moldy pie? Give examples of "dirt and moldy" attitudes. How are our invisible attitudes sometimes like a fresh and hot apple or cherry pie? Give examples of "tasty and fresh" happy attitudes.

3. Read I Thessalonians 2:8. "We cared for you. Because we loved you so much, we were delighted to share with you not only the gospel of God but our lives as well." God wants us to share our lives with others. Just like our neighbor's pies, people can share the "dirt and moldy" parts of their lives or the "tasty and fresh" parts of their lives. How can our attitudes that we share help or hurt?

4. Read Philippians 2:3-5. "Do nothing out of selfish ambition or vain conceit. Rather, in humility value others above yourselves, not looking to your own interests but each of you to the interests of the others. In your relationships with one another, have the same mindset as Christ Jesus." What does "valuing others above yourself" mean? How have you looked to the interests of someone else in your life?

5. We are going to make an invisible gas. First we pour vinegar over baking soda. (Begin experiment.) What do you see has happened? After the bubbles have popped, can you see the gas? The gas that

we just made is carbon dioxide, a clear, colorless gas that is heavier than air. Carbon dioxide is what is inside some fire extinguishers – it can put out a flame.

6. Now we will prove that the invisible gas is there and that it is heavier than air. We will place a lit candle at the bottom of a ramp and literally pour this heavy, invisible gas down the ramp.

7. What happened? Our job as Christians is to be a light to others and to be a light for Jesus. How can our bad attitudes actually "put out the flame"? One of our main points today is - It is lame to put out someone else's flame! How can we "light up the world" as we share with positive attitudes?

8. Read Acts 4:32. "All the believers were one in heart and mind. No one claimed that any of their possessions was their own, but they shared everything they had." How can sharing your stuff with a joyful heart and attitude to encourage someone else? How can being greedy actually "put out the flame" and discourage other people? In the book of Acts, Barnabas sold some expensive land and gave the money to the needs of the poor. He was given the nickname, "the son of encouragement". How did his good deed of sharing encourage others and "light their flame"?

9. Read Philippians 2:14-15. "Do everything without grumbling or arguing, so that you may become blameless and pure, children of God without fault in a warped and crooked generation. Then you will shine among them like stars in the sky." One of our main points today is - Don't be rude with your attitude. How can our good attitudes make us "shine like stars in the sky"?