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Sincerely,

Kent

REAL Science Challenge Founder Science Department Head (Burnaby South Secondary)

# **Investigation: Do Hot Lemons Release More Juice?**

## **Materials**

- 2 x Graduated cylinders (100mL)
- 2 x 600mL beakers
- 1 x fork
- 1 x knife
- 2 x lemons (of equal size)
- 1 x microwave

## Method

- 1. Place two lemons in the fridge and let sit for 2-4 hours.
- 2. Take out both lemons. Take the first lemon, cut it in half, and juice both halves. Collect all the juice in a 600mL beaker. Then, transfer the juice into a graduated cylinder.
- 3. Take the second lemon and place it in a microwave. Heat the lemon on high for 20-25 seconds.
- 4. Remove the second lemon from the microwave, cut it in half and juice both halves.

  Collect all the juice in a 600mL beaker. Then transfer the juice into a graduated cylinder.
- 5. Compare the amount of juice collected in both graduated cylinders.
- 6. Write a CER statement that answers, "Do hot lemons release more juiice (than cold lemons)?"

# **CER Template**

### Claim

 "Hot lemons release <more, less, or the same> amount of juice than cold lemons"

## Evidence

• "According to our measurements..."

## Reasoning

• "This increase or decrease in juice is because... <and provide reasoning>."