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Sincerely,
Kent
REAL Science Challenge Founder Science Department Head (Burnaby South Secondary)

## Investigation: Do Hot Lemons Release More Juice?

## Materials

- $2 \times$ Graduated cylinders ( 100 mL )
- $2 \times 600 \mathrm{~mL}$ beakers
- 1 xfork
- $1 \times$ knife
- $2 \times$ lemons (of equal size)
- $1 \times$ 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 600 mL 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 600 mL 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>."

