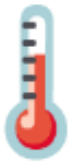
🌡️ Energy Changes: Hot or Cold?

Biology A · Unit 3 · Level 2



Name: _____

A7 Energy Reactions: Investigation 1 (baking soda + vinegar) and Investigation 2 (baking soda solution + calcium chloride).

🧺 Investigation 1

- ☐ 🍶 **1 cup** vinegar
- ☐ 🧂 **1 cup** baking soda
- ☐ 🌡️ **1** thermometer

🧺 Investigation 2

- ☐ 💧 **1 cup** baking soda solution
- ☐ 🧂 **1 cup** calcium chloride (staff pours)
- ☐ 🌡️ **1** thermometer

🌱 Steps: check each box when you finish

1. 🌡️ **Investigation 1**: put the thermometer in the vinegar. Record the start temp. ☐
2. 🧂 **Add** all the baking soda. Watch it fizz. ☐
3. 📉 **Record** the end temp when it stops changing. Did it go up or down? ☐
4. 🌡️ **Investigation 2**: thermometer in the baking soda solution. Record the start temp. ☐
5. 🧂 Staff **adds** the calcium chloride. ☐
6. 📈 **Record** the highest temp. ☐
7. 🧠 **Decide**: temperature down = endothermic; temperature up = exothermic. ☐

📋 Data table

Investigation	Start °C	End °C	Up or down?	Endo or exo?
1 Vinegar + baking soda				
2 Baking soda solution + calcium chloride				