Biology A · Unit 5 · Level 2

Combustion Demo: Mallow Out



TODAY'S PLAN

- 👥 Jobs
- ⚠️ Safety
- 🌱 Steps
- ✅ Check
- 📝 Reflect

Get ready

Jobs



Scale reader

Reads the mass before and after (after it cools).



Watcher

Says what they see: flame, smoke, color.



Recorder

Writes the masses and the difference.



Photo taker

Before and after photos.

Safety

Be Safe



🔥 Only the teacher lights the marshmallow and the ethanol. Stay behind the safety line.

🥽 Goggles on. Hair tied back.

🍡 Do not eat the marshmallow. (Gelatin and sugar: allergy or diet check if anyone handles it.)

⏳ Wait 10 minutes before touching the burned marshmallow.

Steps

Steps



1. ⚖️ **Record** the marshmallow's mass before burning.
2. 🔥 **Watch** the teacher burn it for a few minutes.
3. ⏳ **Wait** 10 minutes. Record the mass after.
4. ➖ **Find** the difference (before - after).
5. 🕯️ **Watch** the ethanol burn (30 seconds). Record what you see.
6. 💨 **Explain**: the lost mass left as carbon dioxide and water.

🃏 Check 1 of 2



The marshmallow lost mass because…

Hold up 1, 2, or 3:

1️⃣ Atoms left as carbon dioxide and water

2️⃣ Matter was destroyed

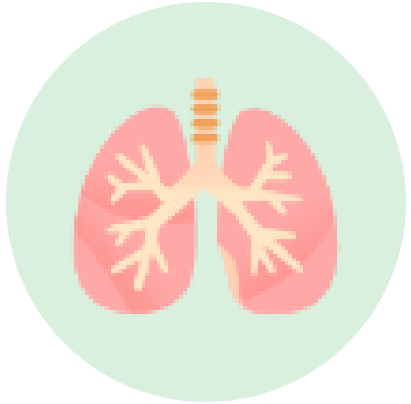
3️⃣ It dried out only



Atoms left as carbon dioxide and water

Matter is never destroyed.

🃏 Check 2 of 2



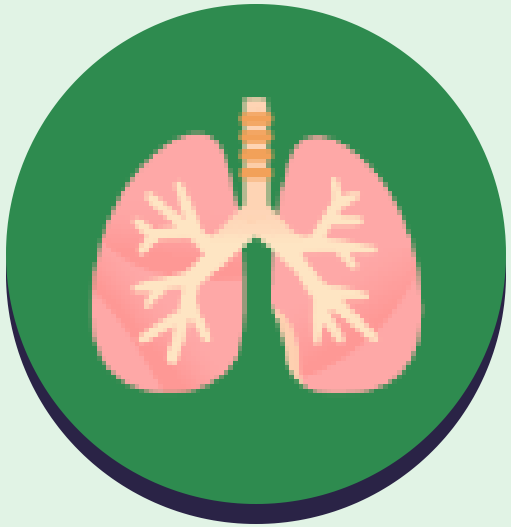
How is this like our cells?

Hold up 1, 2, or 3:

1️⃣ Cells use fire

2️⃣ It is not like cells

3️⃣ Cells also break food with oxygen into CO2 + water



Cells also break food with oxygen into CO2 + water

Same reaction, slow and safe.

Wrap-Up

Clean Up + Reflect



- 🥽 Goggles back
- 📝 Data + reflection