Biology A · Unit 2 · Level 2

Pop Bead Photosynthesis



TODAY'S PLAN

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

Get ready

Jobs



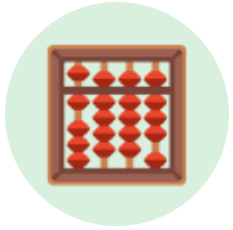
Builder

Snaps beads into molecules.



Breaker

Breaks molecules apart in the light reactions.



Counter

Counts atoms: same number in and out.



Recorder

Fills in inputs and outputs.

Safety

Be Safe



📿 Beads stay on the tray and out of mouths.

🧹 Pick up dropped beads so no one slips.

Steps

Steps



1. 📿 **Build** 6 water (H2O) on the water card and 6 CO2 on the atmosphere card.
2. ☀️ **Light reactions**: move water to the light card, shake it (light energy), split into H and O.
3. 🫧 **Join** the O atoms into O2. Put them on the atmosphere card.
4. 🔄 **Calvin cycle**: move the H atoms and the 6 CO2 to the Calvin cycle card.
5. 🍬 **Build** one glucose (6 C, 12 H, 6 O) and the leftover O into O2.
6. 🧱 **Count**: same atoms at the start and end?

🃏 Check 1 of 2



The light reactions split…

Hold up 1, 2, or 3: 1️⃣ Water 2️⃣ Glucose 3️⃣ Oxygen

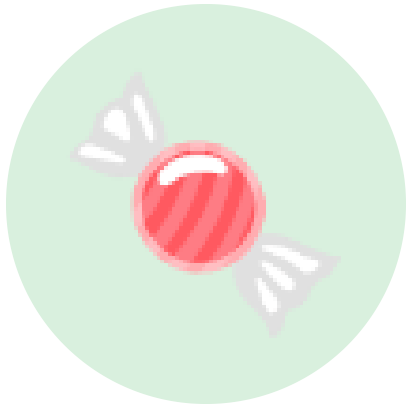
✅ Answer · Card 1 of 2



Water

Water is split; oxygen is released.

🃏 Check 2 of 2



The Calvin cycle builds…

Hold up 1, 2, or 3:

1️⃣ Water from oxygen

2️⃣ Light

3️⃣ Glucose from CO2

✅ Answer · Card 2 of 2



Glucose from CO2

CO2 + hydrogen → glucose.

Wrap-Up

Clean Up + Reflect



📿 **Beads back**

📝 **System diagram + reflection**