EVIDENCE 1

Priestly J. 1775 Experiments and observations on different kinds of air, London

"Suspecting that the same plant might be capable of restoring putrid air to a certain degree only, or that plants might have a contrary tendency in some stages of their growth, I with-drew the old plant, and put a fresh one in its place, and found that, after seven days, the air was restored to its former wholesome state…"

"That plants are capable of perfectly restoring air injured by respiration, may I think, be inferred with certainty from the perfect restoration, by this means, of air which had passed through my lungs, so that a candle would burn in it again, though it had extinguished flame before, and a part of the same original quantity of air still continued to do so…"

"One might have imagined that, since a common air is necessary to vegetable, as well as to animal life, both plants and animals had affected it in the same manner; and I own I had that expectation, when I first put a sprig of mint into a glass jar, standing inverted in a vessel of water, but when it had continued growing there for some months, I found that the air would neither extinguish a candle, not was it all inconvenient to a mouse, which I put into it …"

Object (s) in Jar	First Observation	Time Elapsed	Second Observation
Plant	It is ok	4 hours	It is ok
Candle	It is lit	20 minutes	Falme goes out
Mouse	It looks active	25 minutes	It faints
Candle + mouse	Candle is lit, mouse is active	10 minutes	Flames goes out, mouse faints
Candle + plant	Candle is lit, plant is ok	2 hours	Candle is lit, plant is ok
Plant + mouse	Mouse looks active, plant is ok	3 hours	Mouse looks active, plant is ok

Claim:
Evidence: Source of Evidence:
Reasoning (why the evidence supports the claim):

EVIDENCE

Ingenhousz J. 1779. Experiments upon plants, London

"If the sun caused this air to ooze out of the leaves by rarifying the air in heating the water, it would follow that, if a leaf, warmed in the middle of the sun-shine upon the tree, was immediately placed in water drawn directly from the pump, and thus being very cold, the air bubbles would not appear till, at least, some degree of warmth was communicated to the water; but quite the contrary happens. The leaves taken from trees or plants the midst of a warm day, and plunged immediately into cold water, are remarkably quick in forming air bubbles, and yielding the best dephlogisticated air. If it was the warmth of the sun, and not its light, that produced this operation, it would follow, that, by warming the water near the fire about as much as it would have been in the sun, this very air would be produced; but this is far from being the case. I placed some leaves in pump water, inverted the jar, and kept in near the fire as was required to received a moderate warmth, near as much as a similar jar, filled with leaves of the same plant, and placed in the open air, at the same time received from the sun. The results was, that the air obtained by the fire was very bad, and that obtained in the sun was dephlogisticated air"

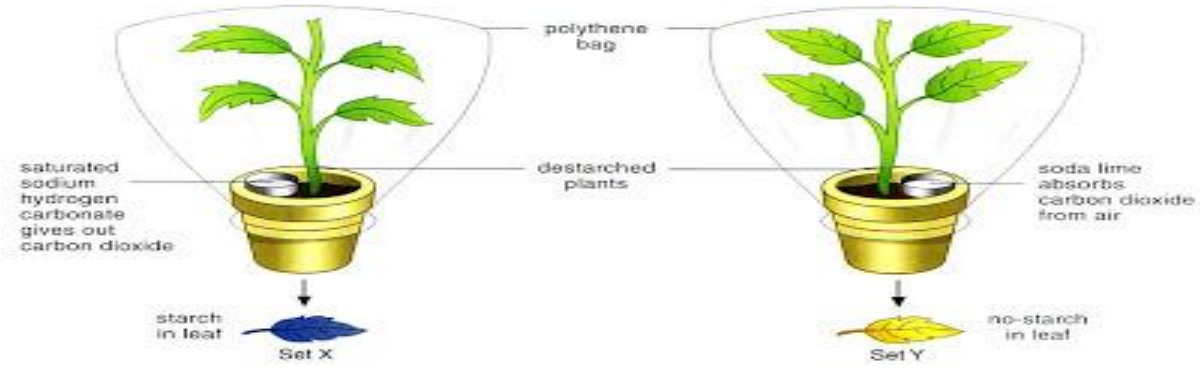
"The production of dephlogisticated air from leaves is not owing to the warmth of the sun, but chiefly, if not only, to the light. No dephlogisticated air is obtained in a warm room, if the sun does not shine upon the jar containing the leaves."

Objects in Jar	Light	Time	Observation
plant	yes	after a day	no visible changes
Plant	No	After a day	No visible changes
Plant + candle	No		Candle would not light
Plant _+ mouse	No		Mouse faints

Claim:

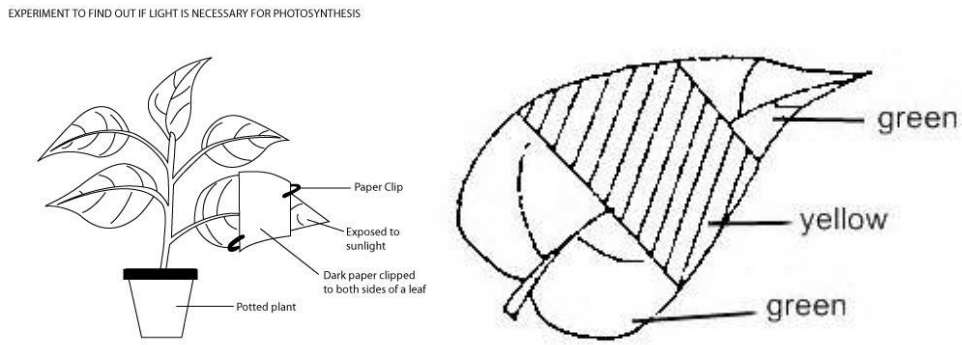
Evidence: Source of Evidence:
Reasoning (why the evidence supports the claim):

EVIDENCE 3



Claim:
Evidence: Source of Evidence:
Reasoning (why the evidence supports the claim):

EVIDENCE 4



Claim:

Evidence: Source of Evidence:
Reasoning (why the evidence supports the claim):