

Chemistry Questions

Your group is going to write one or two sentences explaining where the mass came from.

Mass is the amount of matter in an object.

Where did the mass in the tree come from?



seed

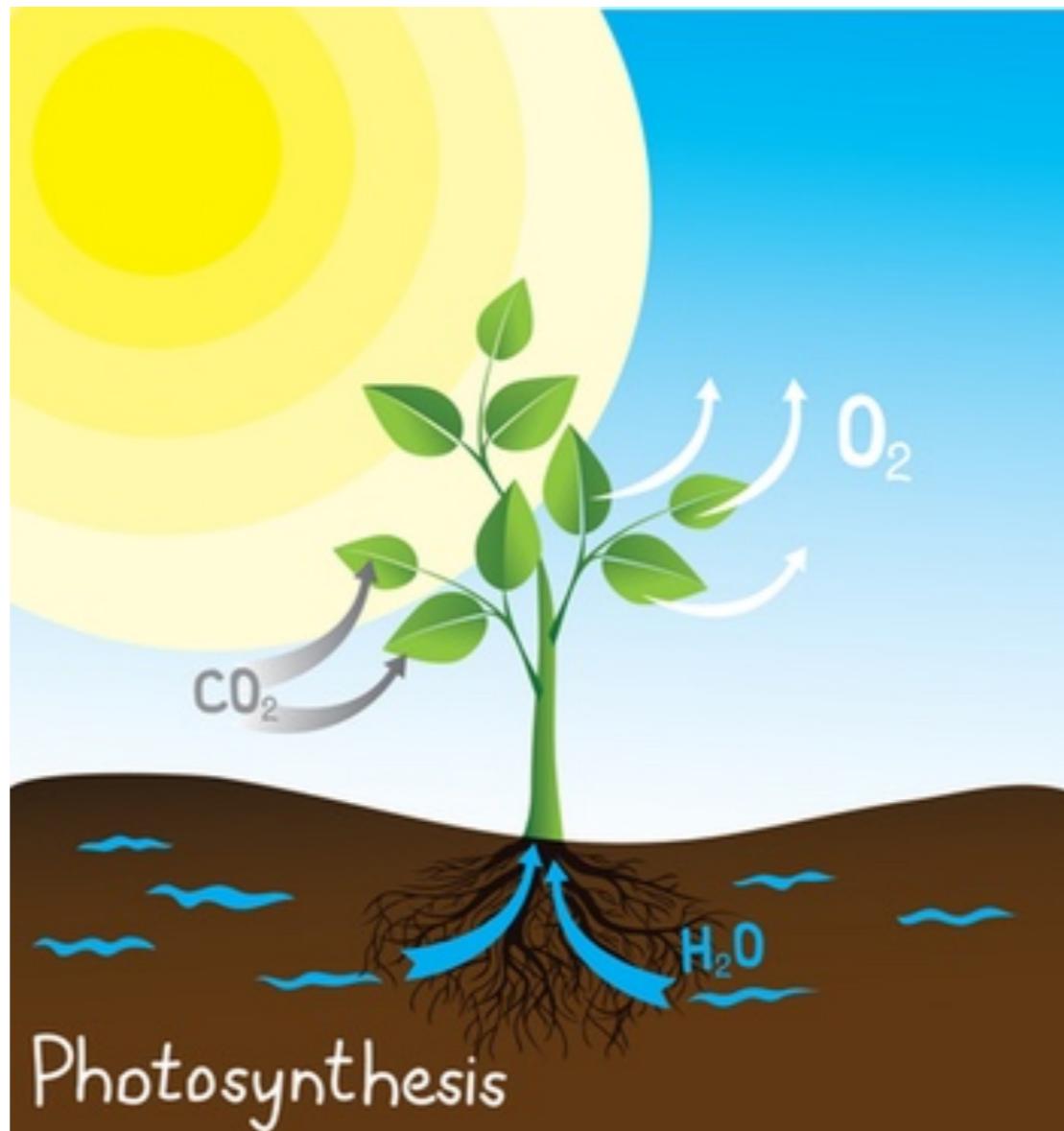


tree

Mass is the amount of matter in an object.

In photosynthesis, **all of the Oxygen in water is released as Oxygen gas.**

Where does most of the mass come from?



Since Carbon and Oxygen are both much larger atoms than Hydrogen, most of the mass in a tree came from the air.

Periodic Table of Elements																																							
Hydrogen		Carbon														Oxygen																							
1	H	5	B	6	C	7	N	8	O	9	F	10	Ne	13	Al	14	Si	15	P	16	S	17	Cl	18	Ar														
3	Li	4	Be	11	Mg	20	Ca	21	Sc	22	Ti	23	V	24	Cr	25	Mn	26	Fe	27	Co	28	Ni	29	Cu	30	Zn	31	Ga	32	Ge	33	As	34	Se	35	Br	36	Kr
19	K	38	Sr	39	Y	40	Zr	41	Nb	42	Mo	43	Tc	44	Ru	45	Rh	46	Pd	47	Ag	48	Cd	49	In	50	Sn	51	Sb	52	Te	53	I	54	Xe				
37	Rb	56	Ba	72	Hf	73	Ta	74	W	75	Re	76	Os	77	Ir	78	Pt	79	Au	80	Hg	81	Tl	82	Pb	83	Bi	84	Po	85	At	86	Rn						
87	Fr	88	Ra	104	Rf	105	Db	106	Sg	107	Bh	108	Hs	109	Mt	110	Ds	111	Rg	112	Cn	113	Uut	114	Fl	115	Uup	116	Lv	117	Uus	118	Uuo						

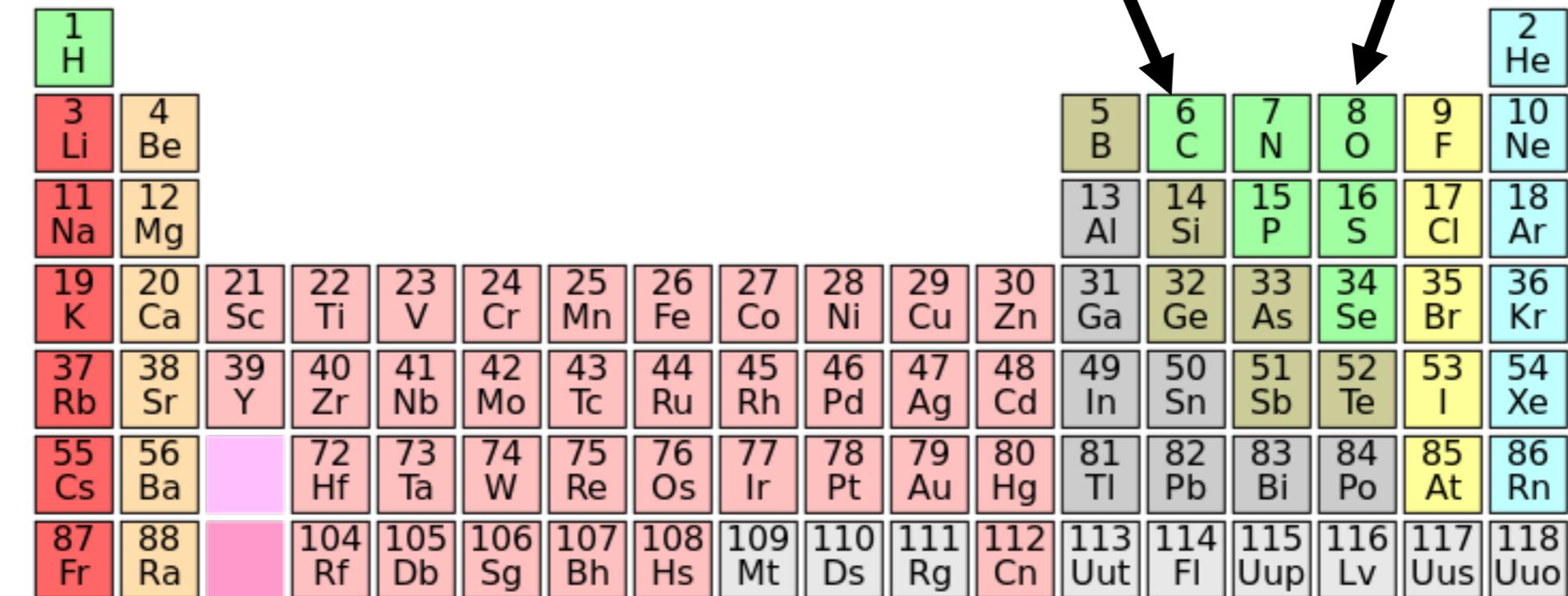
Plants have a lot of carbohydrate (sugar and starch) and photosynthesis makes carbohydrates.

Carbo = Carbon
Hydrate = Water (H₂O)

Hydrogen

Carbon

Oxygen

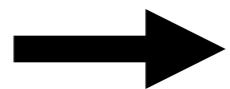


Photosynthesis Misconception

http://www.learner.org/vod/vod_window.html?pid=77

Play at 3:15

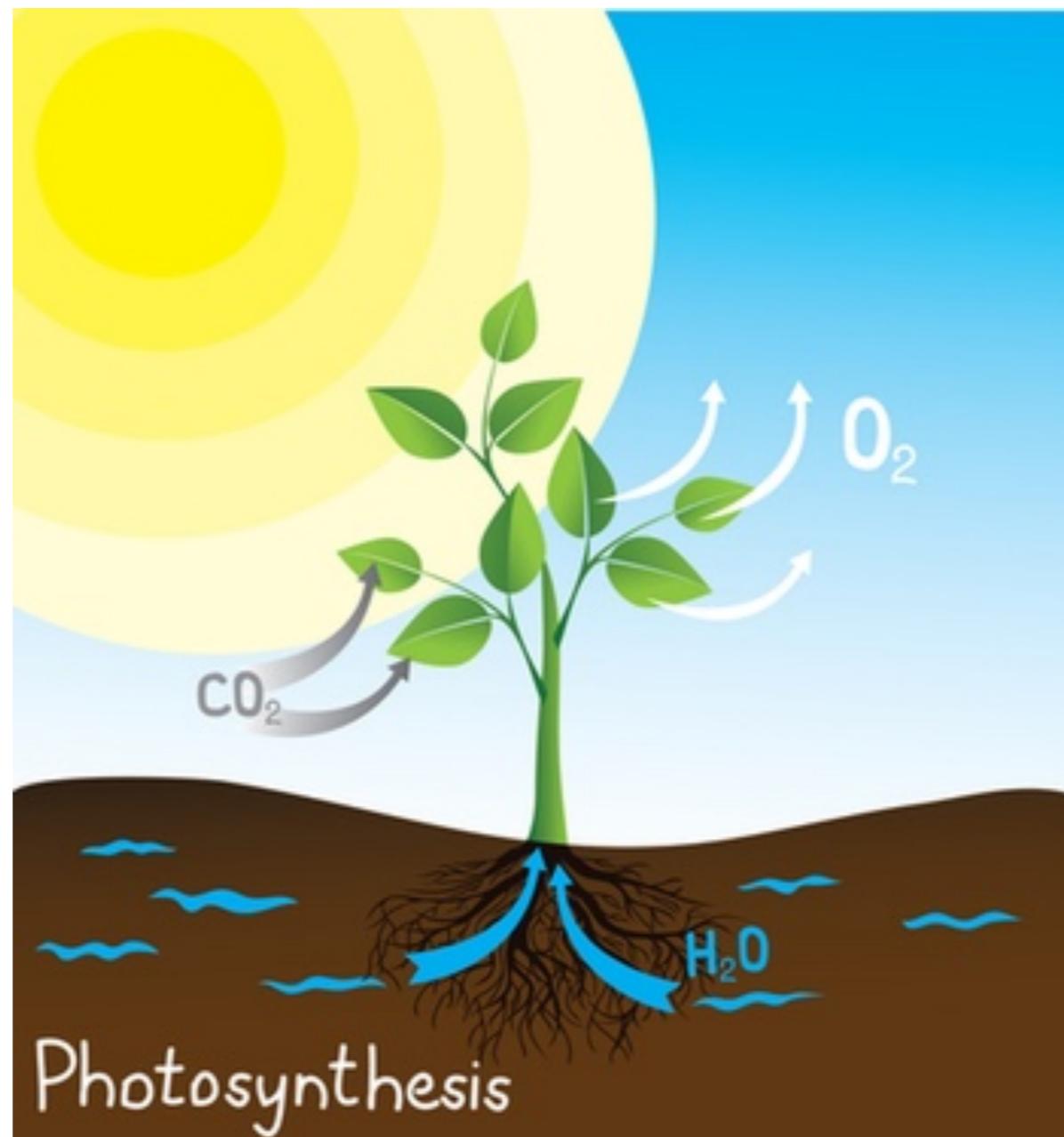
Where did the mass come from?



Animals get all of their mass from the food it eats.



Plants are called **autotrophs** since they make their own food using photosynthesis.



Animals are called **heterotrophs** since they need to eat (consume) their food.

