

SCIENCE SPAZA

ACTIVITY 5: 2024

LEAVES CAN BREATHE?

Yes, leaves can breathe! They take carbon dioxide from the air and use it (and sunlight) to make energy to grow. This is called **photosynthesis**. As they make energy, they 'breathe' out any extra oxygen and water they don't need.

LET'S SEE IT...



YOU WILL NEED:
A LEAF & A BOWL

1. Fill a glass or plastic bowl with lukewarm water. Now carefully remove a flat, green leaf off a tree or plant. It must be a newly picked leaf.

2. Place the leaf in the bowl of water. You can put a small rock on top of the leaf so that it is totally covered with water.



3. Now wait.... You can set one up the morning of your club meeting, or the night before, and let clubbers see it while they wait for their own to work.

CAN YOU SEE THE BUBBLES?

That's the extra oxygen the leaf doesn't need. It rises to the surface because oxygen is lighter than water. But wait, do plants breathe like us? Nope! They don't have lungs. Instead, they have tiny openings called **stomata** where they take in air. Just like we breathe in oxygen and breathe out carbon dioxide, plants do the opposite. They take in carbon dioxide and give out oxygen. So, when you see those bubbles, you're actually watching the magic of plants at work! It's like seeing the invisible world of **photosynthesis** right before your eyes. Amazing, right?