

Worksheet 2 (answer sheet): Electric current from solar cells – Let's build a dye-sensitized solar cell

Task 2

Construct sentences with the help of the building blocks.

Note: The given words can be used more than once. Use the same pronoun (*I* or *we* or *one*) for all the sentences.

Language building blocks

I we one	fill place identify coat mark remove apply secure use measure let	with in on from onto	concentrated white transparent conductive dense purple positive negative	hibiscus tea syringe screw cap (other) glass plate titanium dioxide layer digital multimeter resistance tin oxide layer pencil layer of graphite felt-tip pen side plus sign drop of iodine tincture teacher layer iodine tincture facing down dye-sensitized solar cell two binder clips
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Conducting the experiment

1. First I fill the screw cap with the concentrated hibiscus tea in the syringe.
2. Then I place the glass plate with the white titanium dioxide layer in the hibiscus tea.
3. In the meantime, I identify the transparent conductive tin oxide layer on the other glass plate using a digital multimeter to measure resistance.
4. Thereafter I use a pencil to coat the tin oxide layer with a dense layer of graphite.
5. Then I mark the side with a plus sign using a felt-tip pen.
6. Now I remove the glass plate with the titanium dioxide layer from the hibiscus tea.
7. Afterwards, I let the teacher apply a drop of iodine tincture onto this purple layer.
8. Then I place the negative glass plate with the iodine tincture facing down onto the positive graphite layer of the other glass plate.
9. Finally, I secure the dye-sensitized solar cell with the two binder clips.