1. Thin film solar cell technologies such as amorphous silicon, copper indium gallium selenide, and cadmium telluride belong to which generation?

- ○ 1st generation
- ◉ 2nd generation
- ○ 3rd generation

✓ **Correct**

That is correct

Thin film solar cells using direct bandgap materials are refered to as second generation solar cells.

2. Amorphous silicon has a higher bandgap (1.7 eV) than crystalline silicon (c-Si) (1.1 eV)

Which part of the spectrum is absorbed to a higher degree by the crystalline solar cell as compared to the amorphous silicon solar cell.

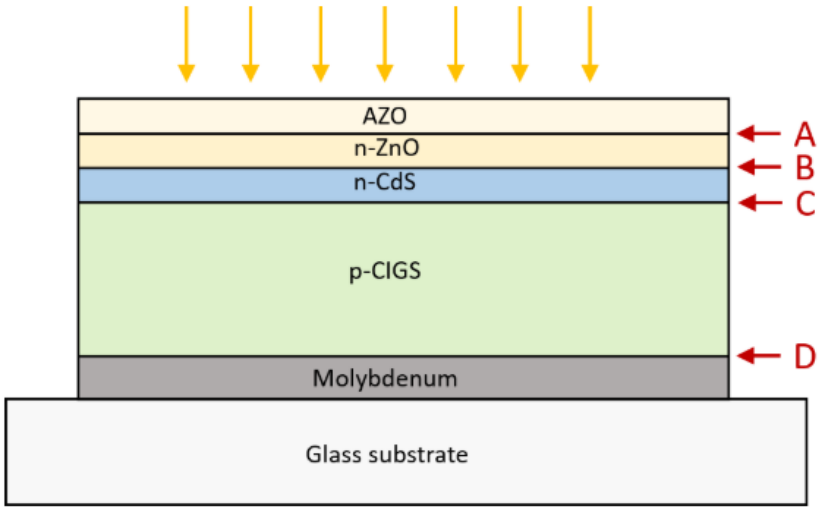
- ◉ Infrared
- ○ Ultraviolet
- ○ X-ray

✓ **Correct**

That is correct

A lower bandgap material absorbs light at higher wavelength as compared to a material with a higher bandgap.

3. **Which interface in the CIGS solar cell is the pn-junction?**



- ○ A
- ○ B
- ◉ C
- ○ D

✓ **Correct**

That is correct

The pn-junction is formed between the CIGS absorber layer and the CdS buffer layer. Unlike a silicon solar cell, the junction is a heterojunction, since it is a junction between two dissimilar semiconductors.