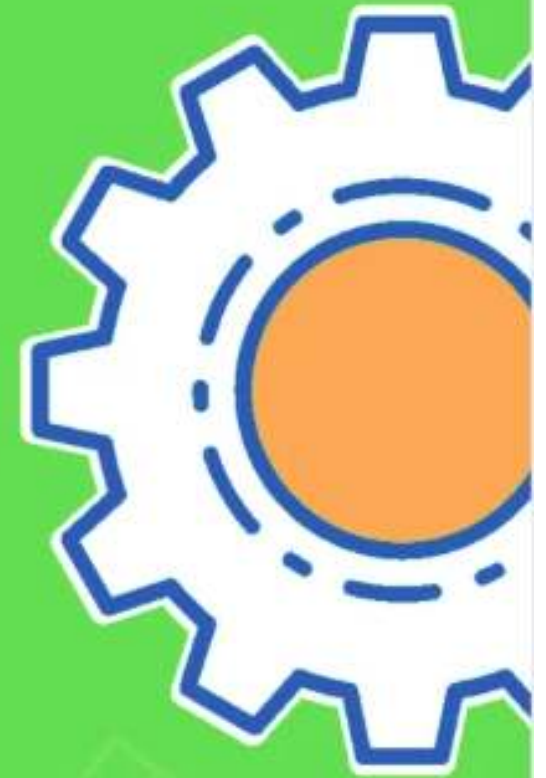


Tiny Technology

Today you are a Materials Engineer!



2

Build Your Crystal Follow the Steps

Use the materials at your table to build a model of the silicon crystal.

1

Start Your Base



Place the first group of atoms on the table. Look at the reference image.

2

Make Connections



Use the connectors to join the atoms. Push them together carefully.

3

Build Up



Add another group of atoms above your first group. Connect the new atoms to the ones below.

4

Keep Going



Continue adding atoms and connectors. Build the structure up and across.

5

Check Your Connections



Look at every connection. Are the atoms connected? Are any loose or missing connections?

6

Compare



Hold your model next to the reference image. Look at the shape, spacing, and connections. Does your model match the pattern?



Polysilicon

A small material. A big role!



It helps
power a cleaner,
brighter future!



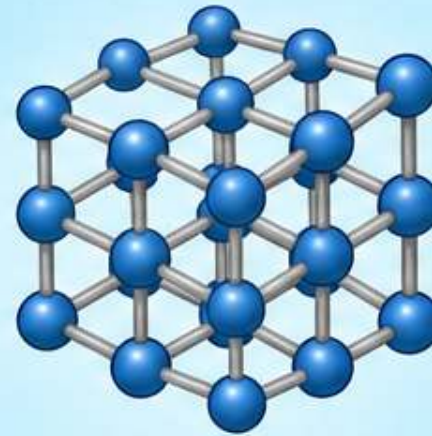
What is Polysilicon?

Polysilicon is a special form of silicon. It is made in a factory and looks like small, shiny pieces or rods. Polysilicon is very pure and super useful!



Polysilicon chunks and rod

The Silicon Structure



Model of silicon atoms
in polysilicon

Polysilicon is made of silicon atoms. The atoms are connected in a strong, repeating pattern. This pattern makes it solid and gives it special properties.



= silicon atom



= bond
(connects atoms)

Each silicon atom is joined to 4 other silicon atoms. This connects the atoms in a strong, 3D pattern.

How is it Made?

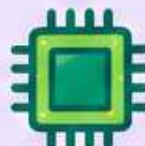


Polysilicon is made by heating high-purity silicon. The heat melts the silicon and then it is turned into solid pieces or rods.

Why is it Important?



It helps make solar panels.



It is used in computer chips and other electronics.



It is very pure and can be melted and shaped.



It helps clean energy and new technology.

Quick Facts

- Polysilicon is made from silicon.
- It is very pure.
- It can be melted and shaped.
- It helps power clean energy and technology.



Polysilicon may be small,
but it makes a big difference
in our world!