Solid in a container physics

Does a solid take the shape of its container?
My Cambridge Physics Coursebook says that Solid "takes the shape of its container". It is endorsed by Cambridge for IGCSE physics. Is it right? How is this possible. It is very Clear and proved. If we put it in a beaker it does not change shape. So why do we say that a solid takes the shape of its container Caption 9.3: "fixed shape".

Why do solids keep their shape and volume when placed in a container?
Solids maintain their shape and volume when placed in a container because their particles are closely packed and have limited ability to move past one another. The solid will take on the shape of the container but will not flow to fill it completely. A solid will stay compact.

What is a solid in chemistry?
Solids are one of the four most common states of matter. A solid is a substance where the molecules or atoms are very tightly bound together. This gives a solid a very rigid volume and shape. Solid objects do not change their shape to fit into a container,as a liquid does.

How does a solid hold its shape?
A solid holds its shape and the volume of a solid is fixed by the shape of the solid. In the liquid phase the molecular forces are weaker than in a solid. A liquid will take the shape of its container with a free surface in a gravitational field. In microgravity, a liquid forms a ball inside a free surface.

Why do liquids take the shape of their containers?
Liquids take the shape of their containersbecause they are cohesive enough to stick together,unlike gases,but not so much that they maintain a rigid shape like solids. When liquids are in a container,the container prevents them from spreading out completely.

Why does a solid have a rigid volume and shape?
This gives a solid a very rigid volume and shape. Solid objects do not change their shape to fit into a container,as a liquid does. Solids also do not change their volume to take up all available space,as a gas does. The atoms in a solid can be arranged in one of a few ways.

A solid of mass m is initially at temperature ?T below its melting point. The solid has specific heat capacity c and specific latent heat of fusion L. How much thermal energy ...

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Assertion : When a solid melts, its temperature remains the same. Reason : The heat gets used up in changing

the state by overcoming the forces of attraction between the particles. Show Answer Answer: a

To understand the answer to your question, you first have to understand a little bit about the states of matter: solids, liquids, and gases. Regular water is a liquid, but if you cool it down it ...

The molecules in a solid are closely packed together and contain the least amount of kinetic energy. A solid is characterized by structural rigidity and resistance to a force applied to ...

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VIDEO ANSWER: When a solid is placed in the container, it will occupy a certain volume within the container. So the container is larger than the solid, so that maintains its ...

You have a block of a substance that melts normally (such as aluminium) that fits perfectly in the box. Since liquids are less dense than their solid counterparts but a liquid cannot be compressed, what would happen if ...

measure the total mass of the container and the liquid nitrogen ; read the volume of the liquid nitrogen from the scale on the side of the container (i) Give a safety precaution the teacher should take when pouring the liquid ...

The experiment to determine Archimedes" Principle are part of Science Lab Manual for Class 9 CBSE Experiments is designed to help students bridge the gap between theoretical concepts and practical applications ...

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The molecules in solids and liquids are tightly packed, giving them a high density. Gases. In a gas, the molecules are widely separated. As a result of this, gases have significantly lower densities than solids or liquids. At room ...

Matter is the "stuff" that makes up the universe. Everything that has mass is matter. In normal everyday life we come across matter in three states, solid, liquid and gas. They have a fixed shape ...

Figure 11.2 (a) Atoms in a solid always have the same neighbors, held near home by forces represented here by springs. These atoms are essentially in contact with one ...

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The particles of a liquid are arranged in small clusters and condensed like those of a solid. These particles vibrate randomly near their mean positions, but their low viscosity and cluster-form enables them to change shape. When a liquid is ...

The manner in which the atoms of the solid are arranged in three-dimensional space determines the type of the solid. Types of Solids Crystalline Solids. A crystalline solid (also known as a crystal) is a solid in which the constituent ...

Complete the following sentences by circling the correct words. If the temperature of the gas increases, the kinetic energy of the molecules increases / decreases, hence, the ...

Some gas is trapped in a container. Use the kinetic model of matter to explain and predict the changes in the gas pressure for the following cases. State any assumptions you ...

PHYSICS 0625/41 Paper 4 Theory (Extended) May/June 2019 1 hour 15 minutes ... 3 A cube of side 0.040 m is floating in a container of liquid. Fig. 3.1 shows that the surface of ...

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