

Guiding question: How do different factors influence the design and construction of a building?

Availability and properties of materials: Nikhil, Fiza, Farhan, Iliyan A

Examples of Materials:

Bricks, Cement, Concrete, Iron, Steel, Tiles, Mud, Marble

Examples of availability : Materials are found in different parts of the world.

. Agra Tiles/ Marbles are mostly available in India.

. Oil is mostly available in Saudi Arabia. Metal, Concrete, Wood and Iron are mostly available in America.

.Soil and Clay are mostly available in Iceland.

.Thatch is mostly available in Africa.

Climatic condition: Saivishwas, Aman V, Saifan, SaiPriya

Natural disasters: Eliyan, Ayaan, Shelvina examples

Natural Disasters examples : Tornado, Hurricane, Tsunami, Avalanche, Earthquake, Wildfire, Flood, etc.

burj Khalifa can withstand no. 6 of an Earthquake on a Richter Scale. The base is the strongest part of it. The Statue of Liberty can resist a hurricane attack.

Availability of land effects the design of the land. The quantity of the land effects the design of the building. Examples: if we have more land , we can make broad buildings and if we have less land then we would have to make apartments. Another example : Banjaara Hills is a big place so there are also many buildings which have a technology to face any natural disaster.

Economy: Iliyan, Alez, Sai Kiran, sazil Economy means money. We need money to buy land which would help us to build a building. We also need money means economy to buy materials to make house because without materials we could not make buildings. Then you need to pay the workers their salary because they help us to built our home Money is very important to construct a building. Money can be in any part of the world and there are different currencies in different parts of the world.

examples :- like in banjarahil there are many big building and in gujarat there are many small building. In dubai there are many big buildings . now I will name some like burj khalifa, taj mahal akashi kaioko bridge and many more these were the modern and tall buildings. Now I will name some poor buildings

Eco-friendly: Ishan, Anahita, Rehaan examples: · We should see that the house does not harm any :

Plants and trees

Animal's habitat

Humans or animals

- It doesn't pollute air or water
- The materials are not toxic
- There shouldn't be much noise pollution or disturbances
- When you build the house, nothing should be harmed
- The materials should be strong and appropriate for the building or structure
- We shouldn't take much land
- We should use solar water heater
- We should have huge windows to have solar natural light
- The design should be in a way that the building always stays cool
- We should use solar power and not waste electricity
- The building should be strong so that the people inside or outside shouldn't be harmed from any disasters
- We can put mercury on the windows to protect the building from strong sunlight

Example: Burj Khalifa's windows have mercury on them because it's really hot in Dubai, U.A.E.

- The building should be a bit short so that it is easy to go up and down the stairs and we don't have to waste electricity by having lifts

Examples : The Aga Khan Academy, Hyderabad has only two floors, so it is easy for us to move from one floor to another.

another example is bungalows which have two to three floors

human ingenuity: Sanil, ELisha, Aarzoo, Vignesh

Human Ingenuity means to do something according to humans choice .It is a type of a creative design of people's own choice .It is something which a man or a woman would like want it to look.Human Ingenuity also means to plan or to make a blueprint.

Ex-Human like to have there own beliefs like Hindus need have their building in east and their have ranholi in their house.

Ex-The design on some buildings or the building's shape might be like that because the architect might like that design or that shape, some people might like candies, some people might like soccer, some people might like ghost, some people might like books, some people might like buildings, etc.

Some person got a idea to build this type of house because he or she wanted to build a house with eco-friendly things.[Things which we get in nature]and also because he or she liked it a lot .Just like this so many people like so many different things which is their own choice.They made their house of wood and grass.

Technological advances: construction (machines used to construct: tower cranes, bulldozers, etc.), designing (softwares like Google sketch-up and CAD), R&D (use of new and improved materials based on the needs, new discoveries, sensors, surveillance, knowledge of scientific principles (?))