Best material features for constructing a building

Strong

Safe

Available

Comfortable

To last

To protect people

Found nearby

For the weather

How climate changes can affect in constructing?

In hot and dry places

It's better to use thick walls made of mud brick or clay.

These materials keep the inside cool.

Example: Traditional houses in Yazd, Iran use mud bricks and wind towers.



In tropical rainy places

It's recommended to use bamboo, palm leaves, or light wood.

Roofs are steep so rain slides off quickly.

Example: Thatched houses in Southeast Asia use palm or grass roofs.





Answer the Answertions

What's recommended in tropical and rainy places?

To use bamboo, palm leaves, or light wood.

What's recommended in hot and dry places?

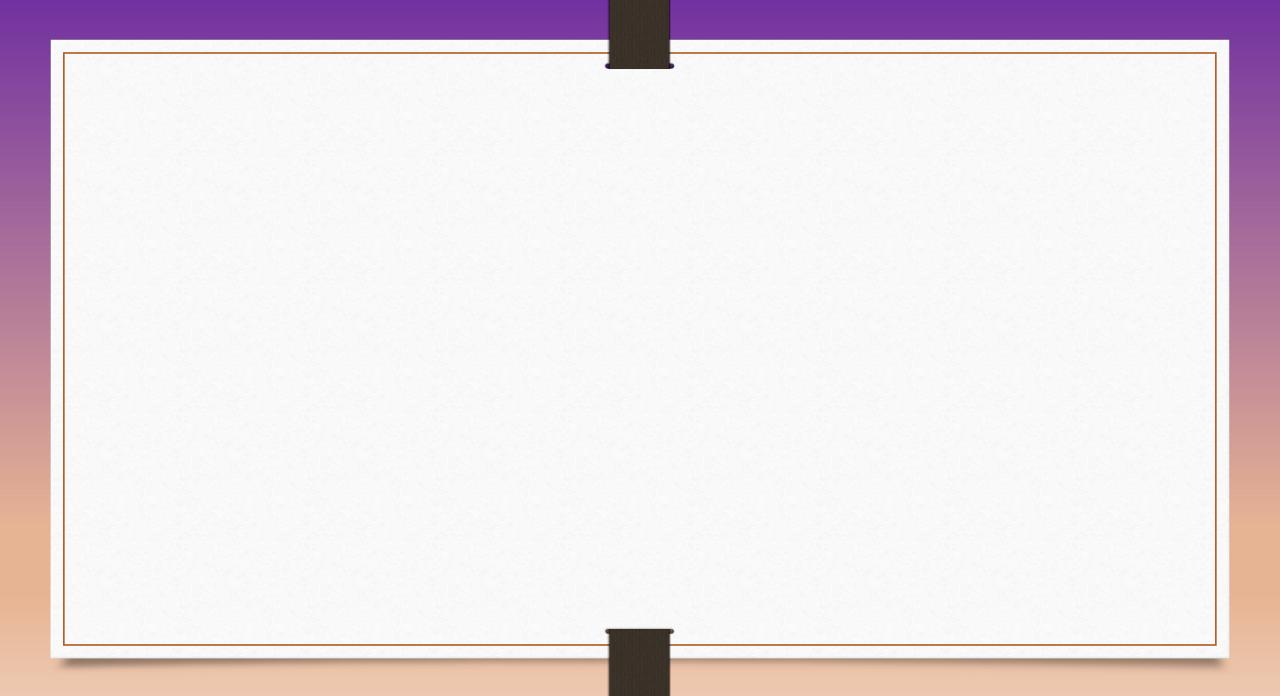
To use thick walls made of mud brick or clay.

Why the material should be safe?

T O

P R O T E C T

P E O P L E



Sustainable Buildings OR Green Buildings

Designed to be good for the environment

Save resources like water, energy and materials

The key features of green buildings

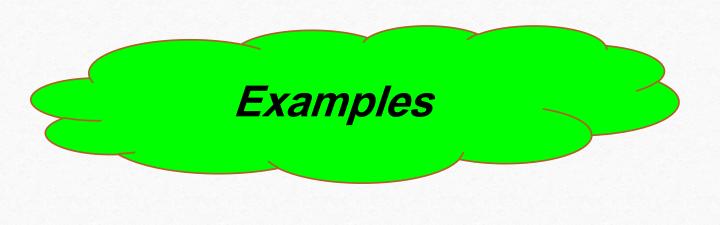
Use solar panels to get power from the sun.

Made from recycled or natural materials (like bamboo or reused wood)

Have green roofs (plants growing on rooftops)

Use rainwater collection to water plants or flush toilets

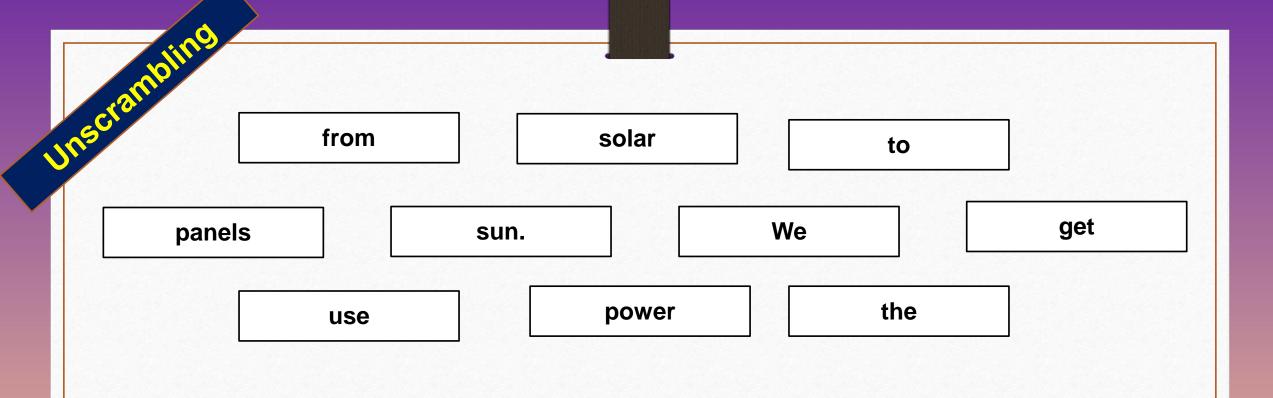
Designed to stay warm or cool without needing too much electricity





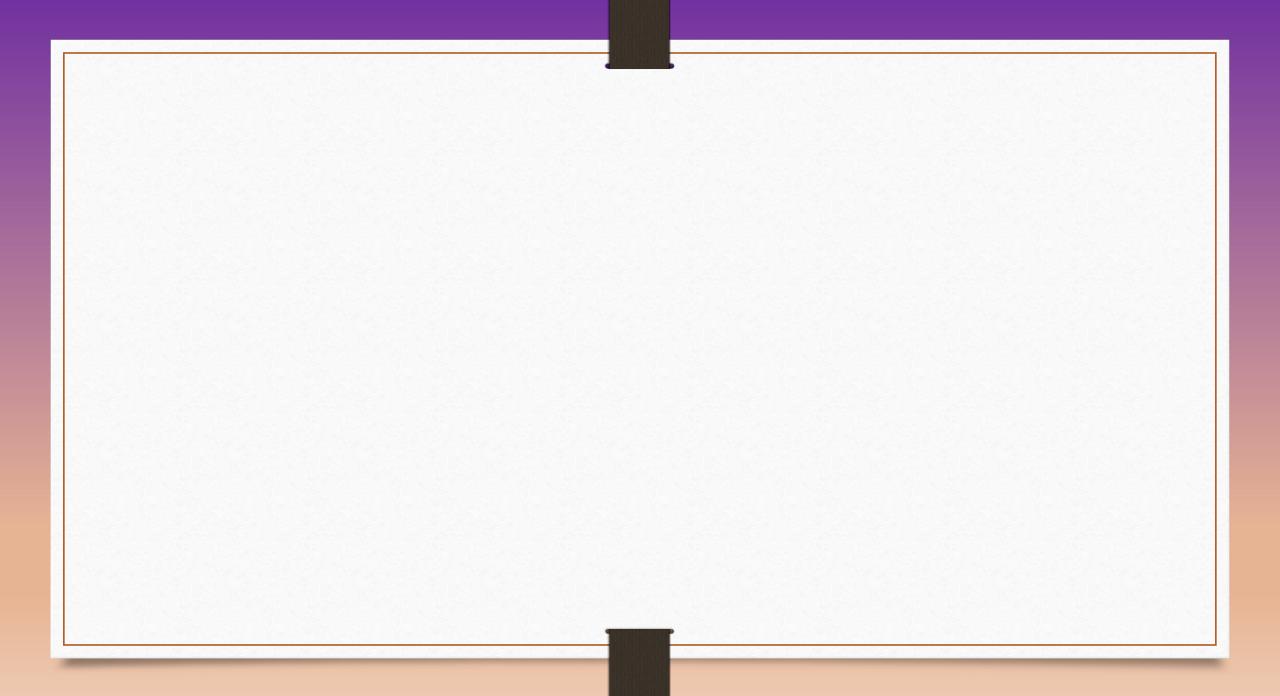






We use solar panels to get power from the sun.

The edge in Amsterdam is an example of green building.



Smart Buildings

Use technology and artificial intelligence

Make life easier, safer and more energy-efficient

The key features of smart buildings

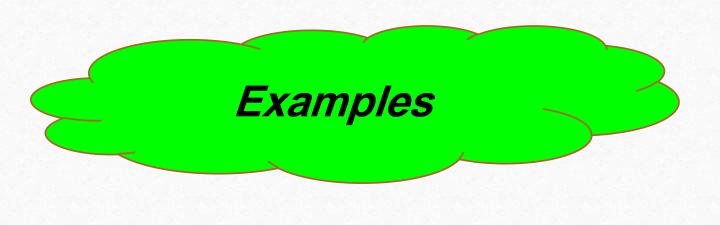
Automatic lights that turn off when no one is in the room

Smart thermostats that change the temperature based on weather or time of day

Sensors that check air quality, light levels or motions

Security cameras and alarms that are connected to phones

Can be controlled with apps or voice commands





Smart phones / homes with Alexa or Google Assistant





It's the function of sensor.

checks air quality, light levels or motions.

It's the function of automatic light.

Turns off when no one is in the room.

Unscrambling temperature

time

day.

the

on

smart

based

or

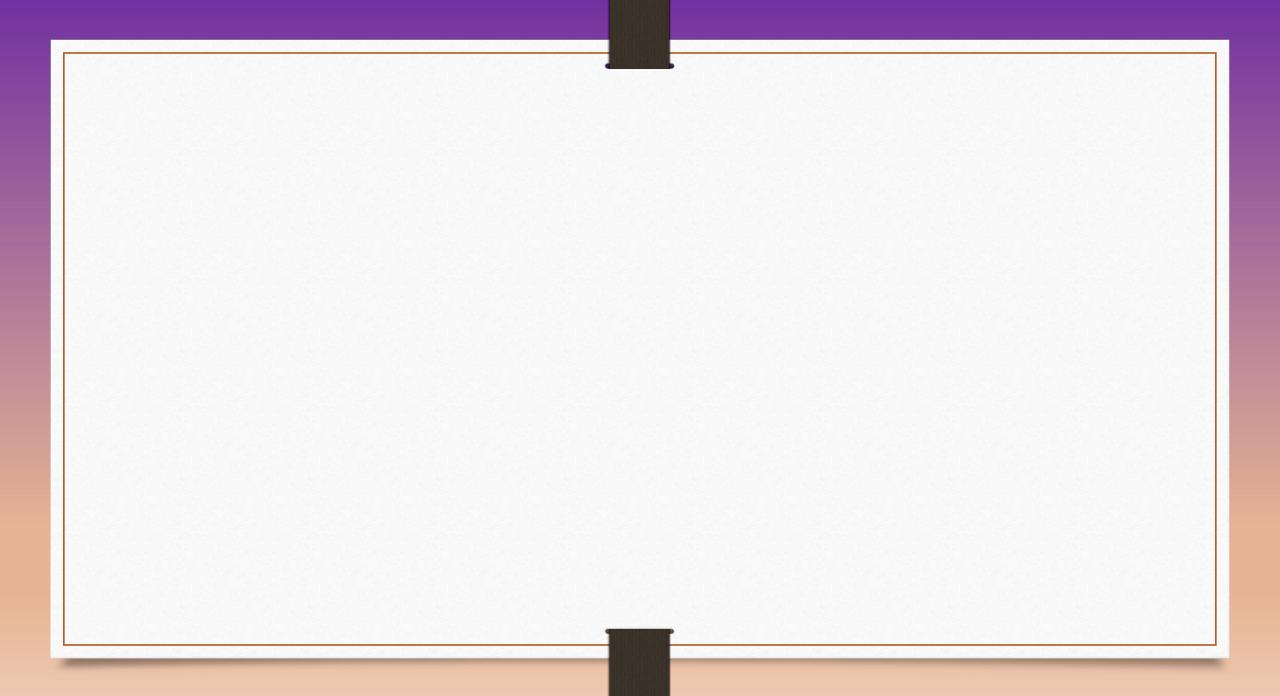
changes

of

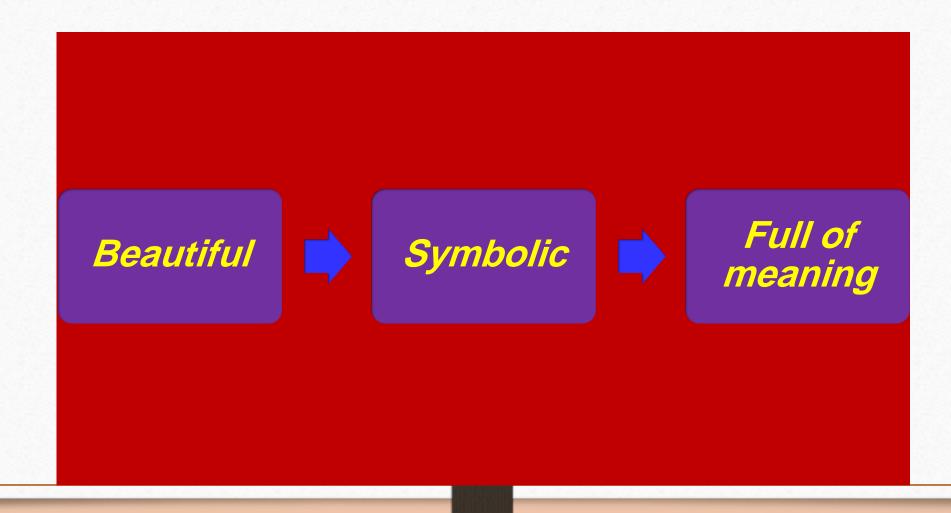
weather

thermostat

Smart thermostat changes the temperature based on weather or time of day.



Iranian architecture



Elements in Iranian architecture

Tilework (Kashi Kari)

Minarets

Iwans

Domes (Gonbad) Tilework (Kashi Kari)

Buildings are decorated with blue, turquoise and gold tiles

Designs include flowers, stars and calligraphy (beautiful writing in Persian or Arabic)

Iwans

A large arched entrance or porch

Domes (Gonbad)

Colourful domes are placed over mosques and shrines.

Sometimes decorated inside with mirror mosaics

Minarets

Tall towers beside mosques

Used to call people to prayer

Famous examples of Iranian architecture

Perspolis

Ancient palace with stone columns and carvings



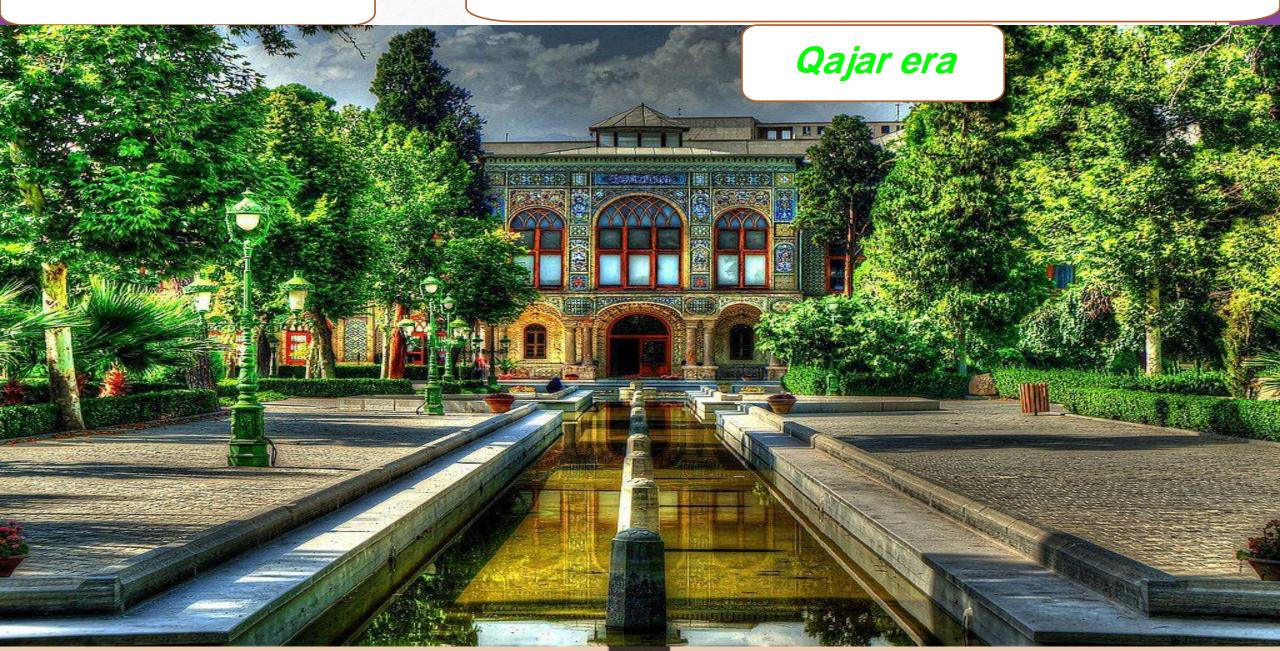
Shah Mosque of Isfahan

Blue tiled domes and arches



Golestan Palace

Royal buildings with mirrors and gardens



Windcatcher (Badgirs) of Yazd

Towers that cool the air using natural wind





The designs in Tilework include flowers, stars and calligraphy.

aning

Name three main features of Iranian architecture.

Beautiful

Symbolic

Full of meaning

Answer the Answertion

What is Iwan?

A large arched entrance or porch.

Hangma

The are used to call people to prayer.

