ARCHITECTURAL ENGINEERING

Y9 Engineering: Home learning

*Submit each task on Microsoft Teams or hand in to Mrs. Patel when you return to school.

Lesson 1: Inspirations for 3D world around us

In the world around us, nothing is ever truly new. It will have been inspired by a feeling, a famous artist, a theme, another item or feedback given about a previous version by the consumers who used the original item. Because of this it is clear to see evidence of this across the world we live in. In the boxes below, please find an image of a building that matches each category given.

Inspired by flowers	Inspired by art deco movement	Inspired by De Stilj
Inspired by birds	Inspired by waves	Inspired by Japanese culture

L1: Sketches

Pick 4 new themes and sketch, by hand, buildings that you would design inspired by those

Theme 1 …………………………………………………..

Theme 2 …………………………………………………..

Theme 3 …………………………………………………..

Theme 4 …………………………………………………..

L2: Find a building design that has caught your eye, inspired by anything

Analyse why you have chosen that particular building. Include information of the inspiration, the history of the building, artist/ architect biography and key facts about the use and purpose of the building.

Fill the page with comments, content and images

Example The Gherkin on next slide. You are required to research another building around the world

Gherkin: Sir Norman Foster

30 St. Mary Axe is a 40 story building in London. It is recognised as one of the more distinctive skyscrapers in the financial district of London. Its form is so unique, that it has been given the nickname "the Gherkin."

The building was designed by famed architect Norman Foster. The Foster and Partners firm has worked on such buildings as the renovated Reichstag, London City Hall, and Wembley Stadium. They are known for their innovative approach to design that stands out particularly well against the more conservative London's buildings. The Gherkin is essentially an elongated, curved, shaft with a rounded end like a stretched egg. It is covered around the outside with glass panels and is rounded off at the corners.
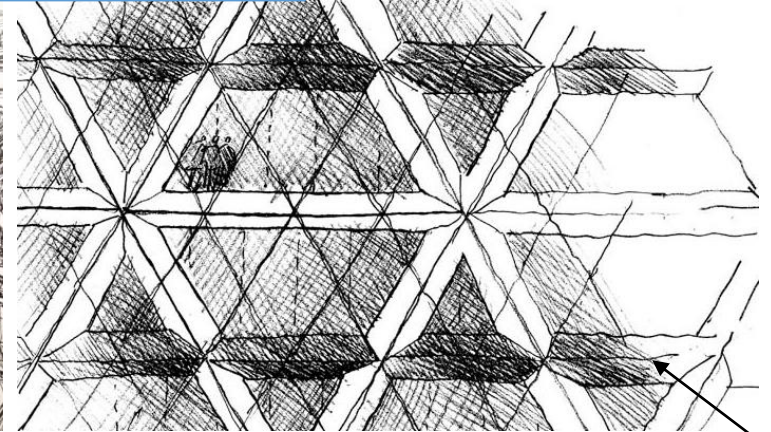
The design of the Gherkin is energy efficient and there are a number of building features that enhance its efficiency. There were open shafts built in between each floor that act as ventilation for the building and they require no energy for use. (www.designbookmag.com)

City Hall in Southwark, London also designed by Norman Foster

I think the energy efficiency of the building is really important to ensure it is used for a long period of time. It is essential that we consider the environment when we are planning new buildings to minimise the damage to our planet for years to come

Here are 2 sketches of the Gherkin. In the 1st sketch you can see how the shape is inspired by the food. In the 2nd, up close sketch, you can see how the windows are constructed and the pattern within the building is exaggerated.

In the photo you can see the upward spiral of the darker areas. I feel that this gives the building extra height and it looks as though the tip is reaching for the sky. I really like the even gapping in the spiral making it look like DNA and when you see the building in the photo, modern against traditional, it really gives you the idea of the size of the enormous building.

L3&4: Choose a task

Choose one of the following tasks to complete for your inspired architecture project. 1 task = 2hrs work

Make:

Out of paper, cardboard and whatever else you have at home, make a small prototype of a building with a clear link to your inspiration or artist.

RESEARCH

Complete some research on how the fashion and inspiration of homes as buildings has changed in the last 200 years. Look at the building materials, the space, the rooms included, the exteriors and the inspirations behind them.

Create a PowerPoint, poster or leaflet on the design of at least 4 homes in 4 different periods across the last 200 years.
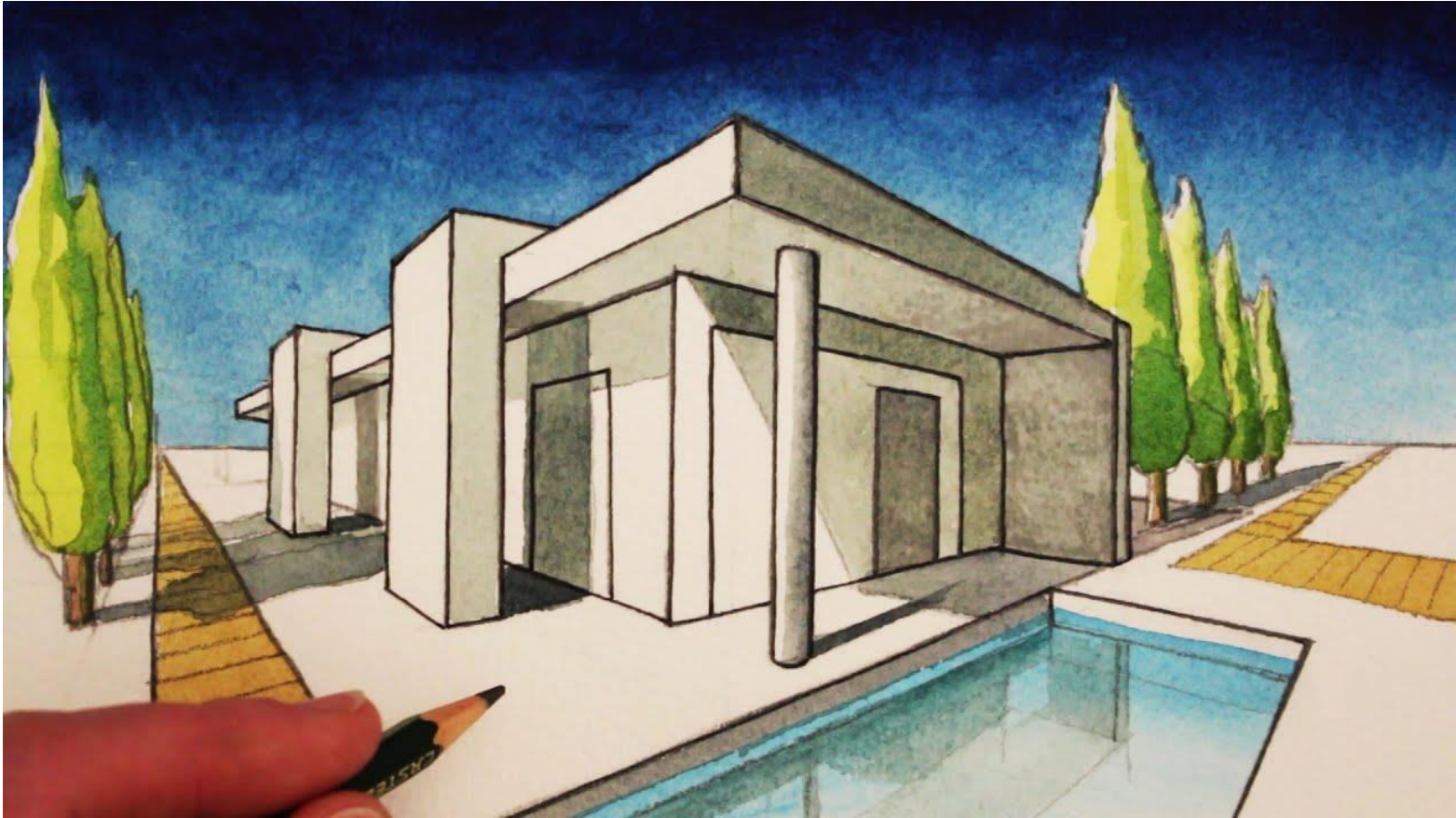
In light of the current world situation you have been given the go ahead to design a completely new hospital building inspired by your chosen theme or artist.
Ensure you label how the building is fit for purpose and think about the use, the look, the theme & the environment in your design plan.

DESIGN

L5&6: Drawing in 3D

You have looked into the past and now it is time to look to the future. For your final task, create a 3D image of your house of the future. Go wild on design features, the possibilities are endless!

This is an example and there are lots of tutorials on YouTube to help you
This task should take 2 hrs.