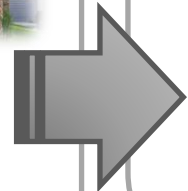


TASK 1 : Mood-board

Research and produce a **mood board** of shipping **container architecture / shipping container houses** in the space below.

Shipping Container Architecture



TASK 2: Ground Floor Layout

Using CAD draw the ground floor of your house. Remember you can only use a **maximum** of **5 shipping containers**

Ground Floor Design

TASK 3: Area of the House

Using the **dimensions tool** on CAD add the overall **length** and **width** of the house and work out the area below.

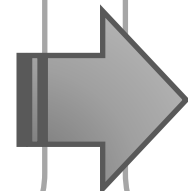
Area of the Ground Floor.

(*hint convert mm into m*)

Area =(Length x Width) .

Length _____m x Width _____m

= Area _____m²



TASK 4: Cost to Build the House

Using the **area calculated** in question **3** use the formula below to work out the **cost to build** your house.

Ground Floor Design

Cost to Build = (Area x £1200)

Area _____M² x £1200 = Cost to Build £_____

Shipping Container reduction (50%)

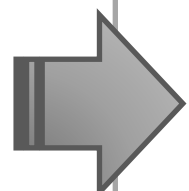
Cost to Build / 2 = Reduced price £_____

Built off site (50%)

Reduced price £_____ / 2 = _____

TASK 5: First Floor

Using CAD draw the first floor of your house. Remember you can only use a **maximum** of **5 shipping containers**



Lesson Objectives / (Nodau Dysgu)

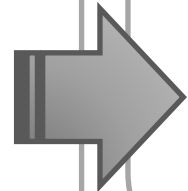
- Produce a ground floor plan that includes dimensions and cost the price to build the design.
- Research sustainable features in terms of lighting and sustainable power and develop a design that incorporates these features so they also aesthetically pleasing.
- Research innovative sustainable features and rainwater collection systems and develop a design that incorporates these features so they also aesthetically pleasing



TASK 6: Solar Gain Research

How can I develop the windows and doors to maximise **solar gain**? Research and produce a **mood board** of passive solar gain, **light wells and overhangs** in the space below.

Solar Gain Research



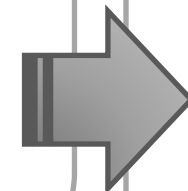
TASK 7: Solar Gain CAD Drawings

Using the research from **task 6**. Add these features to your house CAD drawing.

TASK 8: Solar Panel Research

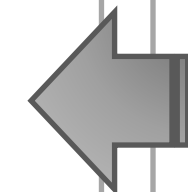
How can I develop environmentally friendly features to compliment the design of my house? Research **solar panels** in the space below.

Innovative / Multifunctional Solar Panel Research



TASK 9: Solar Panel CAD Drawings

Using the research from **task 8**. Add these features to your house CAD drawing.



Lesson Objectives / (Nodau Dysgu)

- Produce a ground floor plan that includes dimensions and cost the price to build the design.
- Research sustainable features in terms of lighting and sustainable power and develop a design that incorporates these features so they also aesthetically pleasing.
- Research innovative sustainable features and rainwater collection systems and develop a design that incorporates these features so they also aesthetically pleasing

