



# KS4 Knowledge Organiser

## Subject: Year 11 Construction

<i>Mrs Allen</i> <i>Raising Standards Leader for KS4</i>	<i>stern029@sflt.org.uk</i>
<i>Mr Roberts</i> <i>Head of Year 11</i>	<i>robem008@sflt.org.uk</i>
<i>Mrs Burgiss</i> <i>Head of Department</i>	<a href="mailto:Khatk095@sflt.org.uk"><i>Khatk095@sflt.org.uk</i></a>

Also, please remember, you should spend 20 minutes on the following apps and websites:

- GCSE Pod
- PIXL Lit
- PIXL Maths App
- Tassomai
- BBC Bitesize
- Onmaths
- Corbett Maths
- English Instagram @greenacreenglish
- Quizlit

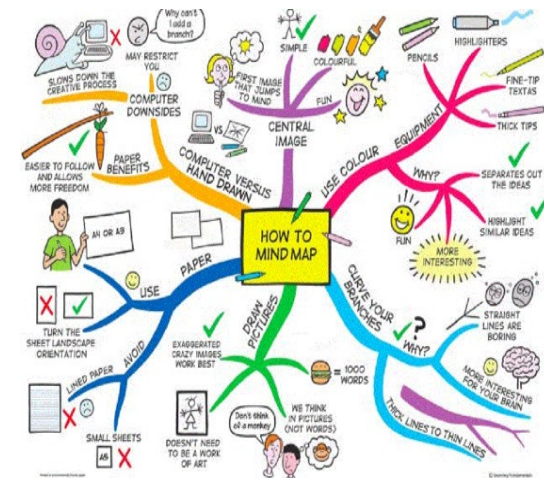
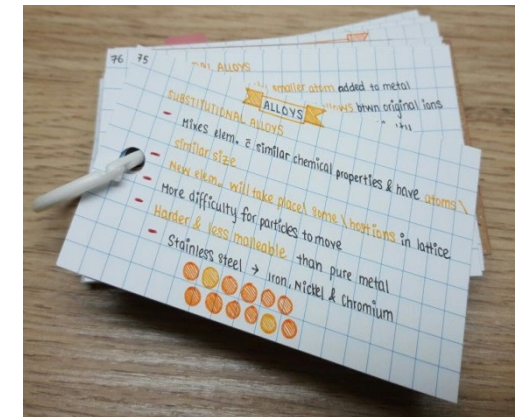
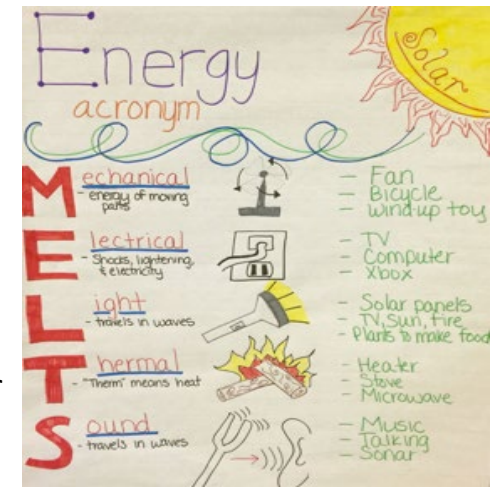
If you would like support with any of the apps, please email ....

## How to use the Knowledge Organiser:

- Your teacher will direct you to what topics to revise for each week
- You will be expected to revise for at least 30 minutes each evening
- Ask someone to quiz you on the key information
- Remember to APPLY the information using the tasks included in each Knowledge Organiser

## Revision techniques and strategies

1. Turn your huge amount of revision notes into small and easy to handle
2. Put a question on the front of your flash cards and write the answer on the reverse – then ask someone to quiz you
3. Mind map – what is the topic and what are the key points you need to remember? You could use different colours for different ideas/characters
4. A question a day – complete an exam question, under timed conditions, each day
5. Record yourself reading your notes and listen back to yourself
6. BUG the question – write out exam questions, examine the key words and plan an answer
7. Use of post-it notes – place post-it notes in key places so you are constantly reading key information
8. Make lists of important facts and figures
9. Draw diagrams to help you visually remember your notes
10. 'Look, cover, say, write, check' – use this method to make sure that you are remembering key information



## **Revision tips**

- Make sure you get some sleep – cognition (acquiring and understanding information) and ability to recall learned facts is limited when you are sleep deprived.
- Eat a healthy, balanced diet - lots of fruit and veg, meats for protein, limit sugary fatty foods.
- Switch off social media/distractions - ignore your phone for a few hours! It will help you keep focused. Social networking, while it's fun, is a big distraction from your revision.
- Give yourself a nice space to work in - have a nice, organised study space with lots of stationary to help you make quality notes/highlight.
- Make a plan - schedule dedicated study time into your daily schedule. Be organised with your time. Stick to your plan. Sacrifice some of your social time for study time. No pain, no gain!
- Start your revision early - start now, if you have not already done so, not days before your exam.
- Do small chunks of revision. Your brain is not capable of mass storing information in a short space of time. Digesting small chunks of information, over a longer period of time, means you are more likely to remember it

Click on the QR code below which will take you to the revision support page on our website:





# Constructing the Built Environment

## Unit 3 revision

### Job roles in construction

#### Client's team



1. Client
2. Architect
3. Engineer
4. Quantity surveyor
5. Project manager
6. Designer



#### Contractor's team



1. Builder
2. Site engineer
3. Site supervisor
4. Safety officer
5. Tradespersons
6. Specialist sub-contractors



#### Statutory personnel



1. Building inspector
2. Town planner
3. Public health inspector



#### General

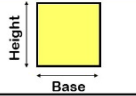
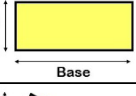
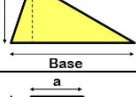
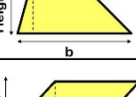
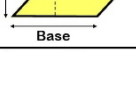



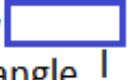
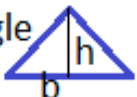

1. Administrator
2. Finance officer
3. Public liaison officer
4. Purchasing/procurement officer
5. Catering
6. Security

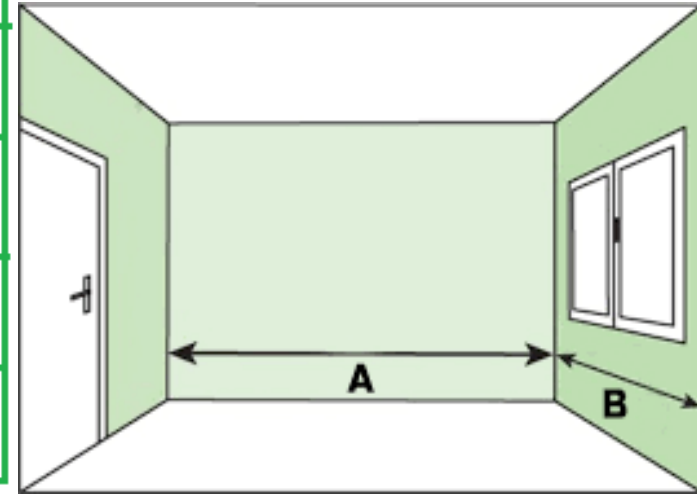


**What are the responsibilities in each of these job roles?**

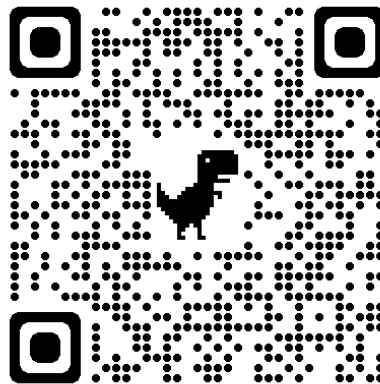
## Maths: Working out area

Shape	Name	Formula for Area
	Square	Base x Height
	Rectangle	Base x Height
	Triangle	Base x Perpendicular Height ÷ 2
	Trapezium	$\frac{(a + b) \times \text{height}}{2}$
	Parallelogram	Base x Perpendicular Height

Shape	Formula
Square  s	Area = $s^2$
Rectangle  l	Area = lw
Triangle 	Area = $\frac{bh}{2}$
Circle  r	Area = $3.14(r)^2$



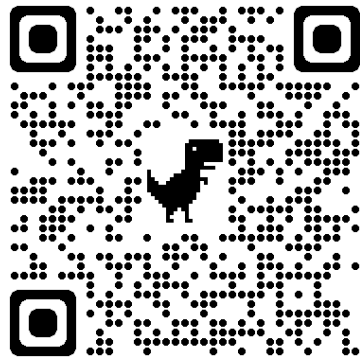
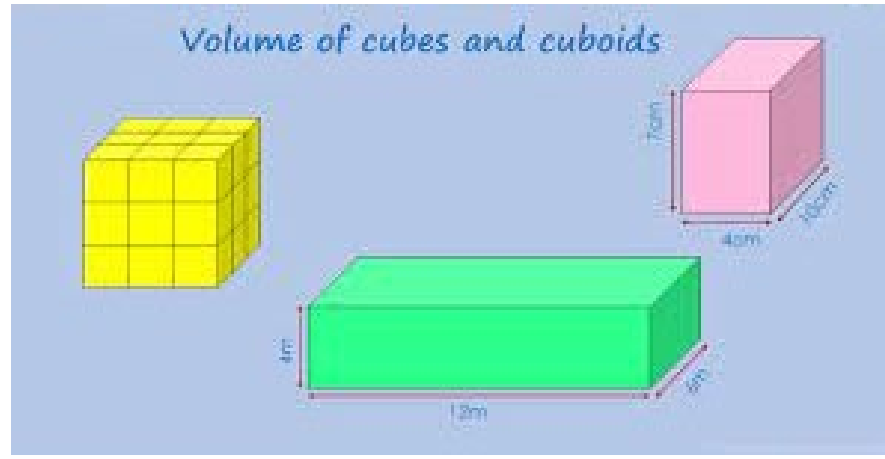
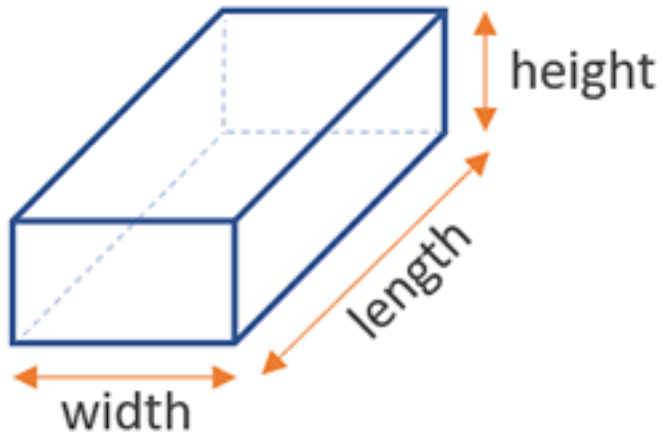
Scan QR code on the right and Watch the video



You will need to calculate the area of a space to figure out how much material you need for painting, flooring.

**Maths: Working out volume**

**You will have to be able to calculate volume for calculating how much of a material you may need. For example concrete for a hole.**



Watch  
the  
video on  
the left

Vocabulary	Wider Research	Apply
Client Contractor Statutory Personnel Architect Engineer Quantity surveyor Project manager Designer Builder/site engineer, Site supervisor, Safety Officer, Tradespersons, Sub-contractors Building inspector Town planner Public health inspector Administrator Finance officer Public liaison officer Purchasing/procurement officer Catering Security Area Length Width Height Volume Thickness	Roles and responsibilities in construction  <a href="https://cadvantage-knowledge.co.uk/product/news-articles/articles/construction-project-team-roles-and-responsibilities/">https://cadvantage-knowledge.co.uk/product/news-articles/articles/construction-project-team-roles-and-responsibilities/</a>  Architecture and Construction Through Mathematics <a href="https://www.dreambox.com/blog/architecture-and-construction-through-mathematics">https://www.dreambox.com/blog/architecture-and-construction-through-mathematics</a>	<ol style="list-style-type: none"> <li>1. Look up the job roles in the client's team in topic 1 and create a visual mind map of each job explaining their responsibilities.</li> <li>2. Look up the job roles in the Contractor's team in topic 1 and create a visual mind map of each job explaining their responsibilities.</li> <li>3. Look up the job roles in for the statutory personnel in topic 1 create a visual mind map of each job explaining their responsibilities.</li> <li>4. Look up the job roles in the general team for topic 1 and create a visual mind map of each job explaining their responsibilities.</li> <li>5. Measure a room in your house and calculate how much carpet you would need for the floor to re-carpet.</li> <li>6. Measure the walls in one room in your house and calculate how much paint you would need to re-paint the walls with 2 layers of paint. If one tub of paint costs £20 and covers 16m<sup>2</sup>, how many tins of paint would you need?</li> <li>7. Your client wants you to create a concrete base for their new hot tub. The base will need to be 2.5m<sup>2</sup> and a thickness of 10cm. What is the volume of concrete needed?</li> </ol>