



SKYSCRAPING

Overall Essential Question: *How can we build the “best” skyscraper?*

Mathematical Essential Questions:

- *What are the ideal area, volume and surface area calculations for a skyscraper?*
- *What impact do these calculations have on cost?*

YOUR TASK:

Project Summary: You and your team will design a skyscraper based on your research on how to construct one in the “best” manner.

- Each group member will be responsible for designing and measuring one section of the building
- Your group will combine all three sections into a single building that is structurally feasible
- Your group will determine the overall cost of the building
- Your group will use presentation media software (PowerPoint, Keynote, Prezi or another approved program) to compile the individual and group work for final assessment and eventual benchmark defense

ASSESSMENTS

- **Notebooks** – All project-related worksheets and research notes will be kept in students’ binders
 - **Order and completeness (CWH)**
 - **Correctness of calculations (AK)**
- **Content Mini-lessons (3)** - Given during the third week on critical math content for the project
 - **Homework (3 worksheets)** – For each lesson, a worksheet will be given on that topic to be completed as homework (**CWH**)
 - **Closing Test** – At the end of the project, a test on those topics will be given (**MK**)
- **Presentation Media** – Final compilation of findings, reasoning and calculations (**group AK**)

STEPS TO COMPLETE THE PROJECT:

1. Task Analysis Research
2. Hand-drawn and Computer-Model concepts
3. Math and Cost Verifications
4. Presentation Media