

Launch Options Sheet

Option 1 *(featured in the resource)*

Bushra presented the problem by telling her students about a recent trip to Hamburg where she learned about a famous new building there, opening in January 2017. The construction of the [Elbphilharmonie](#) went way over budget, in part (she was told) because of the cost of the windows, made using self-cleaning glass.

She asked her students if they thought the self-cleaning glass was worth the cost, which led to a heated debate.

Then she showed them the skyscraper problem and told them we were going to further investigate the cost of washing windows to see if we can come to a consensus about whether or not the building was worth it.

See below for the link to the presentation she used:

[Was this building worth it? \(PDF Version\)](#)

Option 2

Jon initiated the problem by using a three-reads protocol to help students decipher the many layers of the problem.

Read each question 3 times.

Time 1: General Idea

- Read through the question. Think about anything you know about this topic already.

Time 2: Monitor Understanding

- Underline key words
- ?s next to words you don't understand
- ! next to *dangerous words* (not, round to the nearest)

Time 3: Summary

- Read again and *write* the problem in your own words

Option 3

Additional MfA teachers who participated in the PLT introduced the problem using this [video](#) demonstrating the challenges involved in washing the windows in a skyscraper. By giving all students background knowledge into the context of the problem, students can more readily engage with the mathematical content.