Engineering Marvels

Stand-Out Skyscrapers

Area



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Towers to the Sky

"Going up!" can be heard in elevators in most buildings. Some buildings have only a few floors. But some are so high they seem to touch the sky. That is why they are called skyscrapers!

Some skyscrapers are places to live. Some are places to work. Others are places to shop. Some even have roller coasters that speed through the air. And many skyscrapers have all of these things (and more) under one roof!



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There are skyscrapers all over the world. But some skyscrapers stand out for more than just their height. They can be some of the most unusual buildings a country has to offer. From Chicago to Dubai, and cities in between, there are a few skyscrapers that are known for being unique. Which towering treasure will be your favorite?

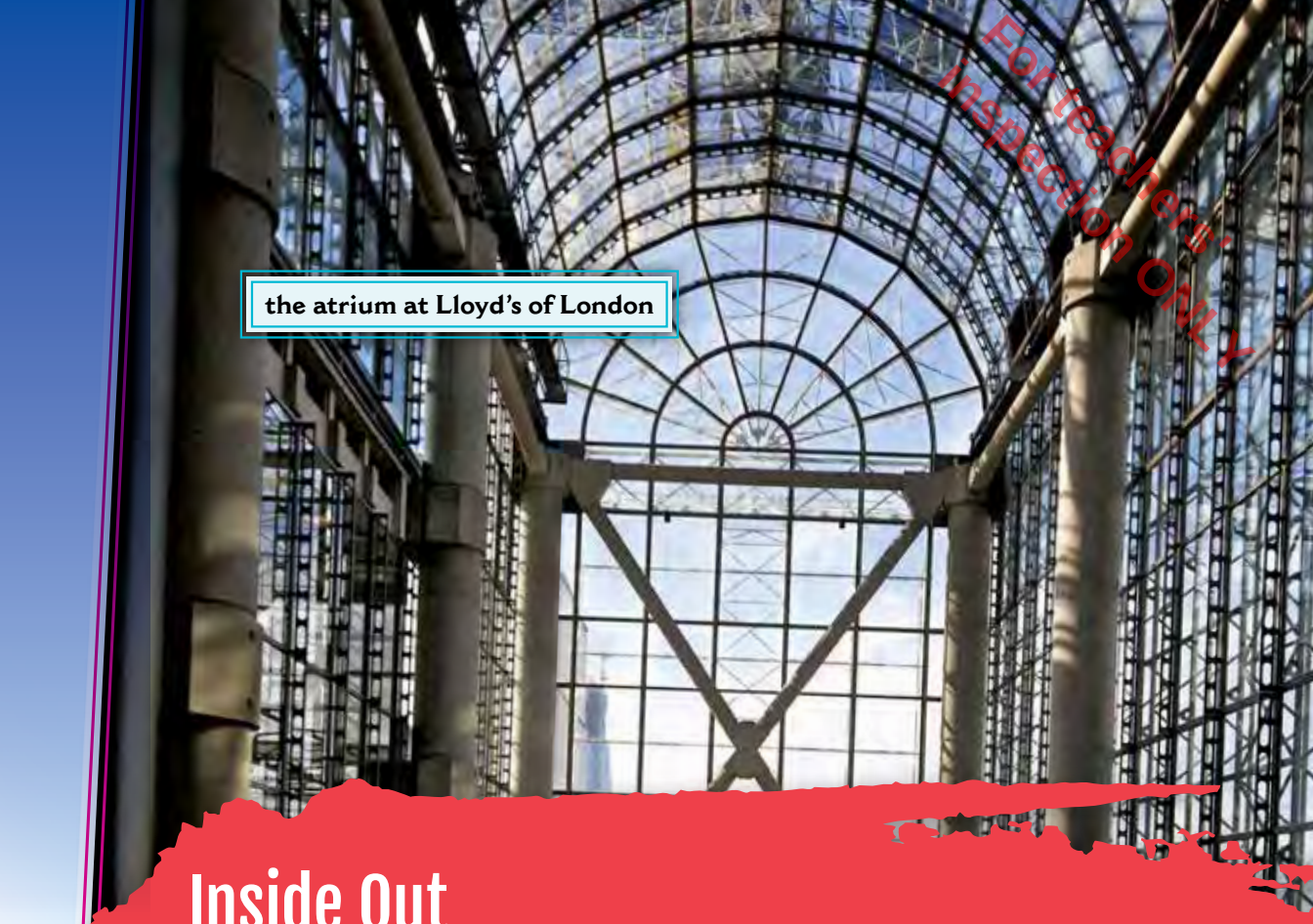


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Tip-Top Tech

All buildings need some type of technology. It helps to make them solid and support weight. It allows for a supply of energy, air, and water. But, those are basic things. Technology can be used in some exciting ways. It can make some skyscrapers even more special. And, it may also help give them a more unique look. Some were even inspired by it!





the atrium at Lloyd's of London

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Inside Out

Lloyd's of London has been in the insurance business since 1688. But, its building is much newer. Lloyd's wanted more space inside. So, the building's planners turned it inside out! Most of the stairs and elevators are on the outside. So are the air, water, and power systems. This gives more space for business.

The inside of Lloyd's is special, too. Its three main towers are topped by a 200-foot (60-meter) high **atrium**. It has a glass roof that lets in natural light. There is also a dining room from 1763! It was put in the new building one piece at a time.

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Something Old, Something New

Castalia, a government building in the Netherlands, was meant to blend in with the rest of the city. But at 340 ft. (104 m) tall, it could not help but stand out!

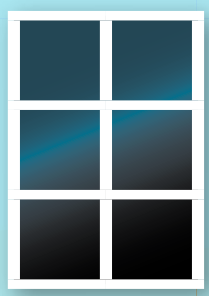
Triangle peaks top this skyscraper's 20 floors. The rooftops are just some of the building's **distinct** features. They have helped make it a **landmark**.



Let's Explore Math

Castalia's windows are also special. They are made of glass squares.

1. How many squares are in each row? How many squares are in each column?
2. How many squares would be needed to replace each window? Explain your thinking.
3. How many squares would be needed to replace 2 windows? How do you know?



The original Castalia was built in the 1960s. The owners wanted something newer and bigger. But, the planners did not want to knock it down. So, they built a new building around the old one. They covered the walls and the roof. Then, they placed the new triangle towers on top. Putting the old and new parts together seemed like a tough job. But, the planners had the right technology for the job. And it worked! Can you tell the old from the new?

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