

BUILDING HIGH TO THE SKY!

An activity to do after reading *Iggy Peck, Architect* by Andrea Beaty

Description

How do skyscrapers stand so tall? Explore tall buildings and build your own super-tall skyscraper inspired by a reading of *Iggy Peck, Architect* by Andrea Beaty!

Audience

Children ages 3–6+, with adult support

Time

45 minutes

Materials

- Tape (any kind; duct, masking or clear)
- Paper (any kind; multiple sheets) or newspapers/magazines
- Measuring tape or ruler
- Markers, colored pencils or crayons

Guiding questions

- 1 What are some ways that architects have been able to build tall in different parts of the world?
- 2 What are some of the challenges that architects in Chicago face when building tall in this particular environment?

Instructions

- 1 Visit the CAC's Buildings of Chicago page at architecture.org/learn/resources/buildings-of-chicago and get to know some of the tallest buildings in Chicago. Which building do you like the best and why? Visit the Willis Tower page and watch the video. Note the unique characteristics of tall buildings. How do their designs help them be super tall?
- 2 Time to brainstorm! Now that you've had a chance to get to know different buildings in Chicago, it's your turn to come up with a design for your very own skyscraper. Draw out some of your ideas, using inspiration from the buildings you discovered on architecture.org. How can you incorporate some of the things you learned into your own sketch? In the next step, you will be using paper to make your skyscraper. Keeping this in mind, how will you make sure your paper tower stays stable?
- 3 Set up a crafting area on the floor, against a wall. Take a sheet of paper and roll it into a tube. Fasten it closed with tape. Repeat this as many times as you want and try it with varying sizes of tubes! How do you think the different sizes of paper tubes will affect how tall your skyscraper can get? How can you make your base stable enough to continue building tall? You can also put color on your tubes of paper by drawing unique doors, windows and decorations.

- 4 Start taping your tubes together and see how tall you can build your skyscraper! Look back at the design you originally sketched for guidance, but don't be afraid to do something totally different too!
- 5 Once you have completed your skyscraper, use your measuring tape or ruler to measure how tall it is. For added accuracy, place the measuring tape or ruler against the wall, alongside your skyscraper. Now that you have your measurements, can you build your skyscraper even taller without it falling down?

Share your work

We'd love to see your work! Share your creation with the Chicago Architecture Center on Facebook or Instagram, using the hashtag #ChiArchitecture

Take it a step further!

Try to build another skyscraper, but this time, focus on making it as stable as you can. Once you feel comfortable with your design, ask a trusted adult to help you test the strength of your skyscraper. Using a fan, hairdryer, or even fanning your hands, complete a wind test. Your wind test should take place about an arm's length away from your building. When you turned on the fan, hairdryer, or fanned your arms, what happened to your skyscraper? Imagine new ways to improve your design and keep trying! Learn more about strong shapes and structures by visiting the CAC's Architecture Essentials page at architecture.org/learn/resources/architecture-essentials. Many more challenges await. Visit our website architecture.org/learn where we regularly post new activities.