

ACTIVITY!

BUILD THE EIFFEL TOWER

Built in 1889 for the World Exposition, the Eiffel Tower honored the French Revolution. It also showcased national **engineering** and design expertise to an audience of global visitors. Originally intended as a temporary monument, it remains one of the world's most visited landmarks.

The structure of the tower itself is actually quite simple! To understand how its rivets and beams join, build a model of your own.

➤ **First, look at photographs of the Eiffel Tower. What shapes do you see?**

What do you notice about its base? How would you describe the structure?

➤ **With those observations in mind, assemble your structure.** Use toothpicks or spaghetti as pillars, beams, and platforms. Join them together with marshmallow rivets.

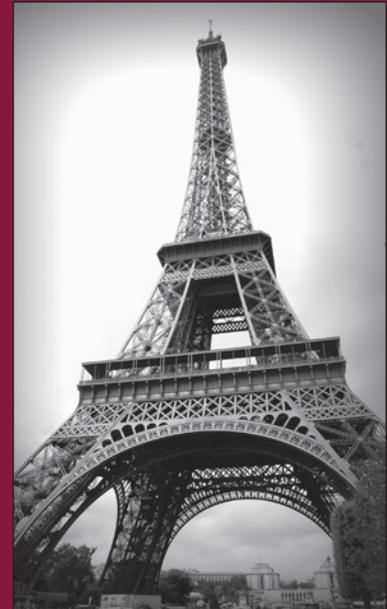
➤ **Experiment with a few different building techniques and with your materials.** What happens if you melt a marshmallow? What if you add other materials, such as tape or glue? What type of base makes for the strongest, highest tower?

Take a look at how the Eiffel Tower was built in this animated video.



What do you note about the different stages of construction?

🔗 Eiffel Tower timelapse



CHEMISTRY KIT

- mini marshmallows
- toothpicks or strands of uncooked spaghetti

Think Like Marie!

Why do inventors and innovators feel the need to put their successes on display, as in the case of the Eiffel Tower? How does invention and innovation bring societies together? Are these prominent displays ever bad for communities? Do some more research on the Eiffel Tower and think about its cultural role in addition to its role as a symbol of great engineering.

WORDS TO KNOW

engineering: the use of science, math, and creativity to design and build things.



TEXT TO WORLD

Do you think there are more female or male scientists working today?