

How to Get Started

1 Getting Set Up

You will need:

- a. A device for the teacher, or “guide” (preferably a tablet)
- b. A mobile phone and compatible VR viewer device (like Google Cardboard™) for the student, or “explorer”
- c. A Wi-Fi® network that is peer-to-peer enabled. It may be helpful to go through a router or hotspot.

Download the FREE Google Expeditions app to your devices from Google Play™ (for Android™) or from iTunes® (for iOS®). The first time you open Google Expeditions, you’ll be offered a brief demonstration of the app. In the demo, tap **Full Screen** to see how the app works without a viewer.

Teachers can start Field Trips, guide students through multiple panoramas, access notes, and highlight points of interest throughout the Field Trip. Students can insert the phone into the viewer and start exploring! The Field Trip must be started by the teacher.

2 Selecting HMH Field Trips

HMH has developed a variety of Field Trips that can be accessed through the Google Expeditions app, and more are coming all the time. Using the search function in the app, type in the exact title as it appears in the Lesson Plan (for example: **Carmen’s Hot and Cold Cap**).

3 Using the HMH Teacher Guides

HMH has developed Teacher Guides for HMH Field Trips with Google Expeditions that correspond to several of our programs. You can access these guides through your HMH Online Teacher Resources and incorporate them into your lessons.

I like it! How can my school purchase the hardware?

Your school can purchase the recommended equipment through any hardware provider or work with a Google-certified provider like Best Buy® Education (bestbuy.com/googleexpeditions). With Best Buy Education, you can purchase a ready-made kit or build your own, depending on what suits your needs.

Expeditions Guidelines

These guidelines must be reviewed and accepted before using the Expeditions app.

- Expeditions is only for users older than age 7. Students should not use Expeditions without adult supervision.
- Make sure that users participating in Expeditions in a Google Cardboard viewer have enough space to look around freely and do not attempt to walk around.
- Take frequent breaks while using Expeditions and Cardboard. If you experience nausea, discomfort, eyestrain, or disorientation, immediately discontinue using Cardboard.
- If you or any users participating in the Expedition session have had or could be prone to seizures, consult a doctor before using Cardboard.
- Ensure that any employees, agents, or contractors who are leading an Expedition have reviewed and understand these guidelines.

Carmen's Skyscraper Caper

Overview

Skyscrapers serve as symbolic landmarks in many large cities around the world. Some skyscrapers are historical landmarks, such as the Flatiron Building in New York City and the Eiffel Tower in Paris. Other skyscrapers, such as the Shanghai World Financial Center and the Willis Tower, are newer mixed-use buildings that include offices, hotels, observation decks, and shopping malls. Each of these skyscrapers is unique and significant in its own way.

In this activity, students will take an HMH Field Trip to visit six iconic skyscrapers that are also landmarks: the Eiffel Tower, Chrysler Building, Empire State Building, Willis Tower, Petronas Twin Towers, and Burj Khalifa. Students will take notes on each skyscraper and discuss its unique features. Then they will work in groups to research one skyscraper and create a magazine ad explaining its significance.

Objectives

In this lesson, students will learn to:

- explain what a skyscraper is and give examples of skyscrapers as iconic landmarks
- describe how skyscrapers preserve and symbolize a city's history
- evaluate the aesthetic qualities and cultural significance of select global landmarks
- write explanatory text to convey information clearly and accurately

Classroom Activity

- Two 45-minute class periods

Introduce

To introduce the lesson, ask students, "Who can tell me what a skyscraper is?" (*A skyscraper is a very tall building of many stories, usually for commercial or office use.*) Discuss the responses as a class. Then ask, "What skyscrapers come to mind when you think about major cities around the world? What are some skyscrapers in the United States?" Discuss the responses and, if desired, talk about any skyscrapers that students may have visited. Tell students that on this HMH Field Trip, they will visit six skyscrapers. Then they will work in groups to research one skyscraper and create a magazine ad explaining its significance.



Teach

1. Have each student create a chart like the one below. Tell students that they will use their charts to record each skyscraper's location, description, and significance and to write additional notes.

Skyscraper	City	Description	Significance	Additional Notes
Eiffel Tower				
Chrysler Building				
Empire State Building				
Willis Tower				
Petronas Twin Towers				
Burj Khalifa				

2. Guide students through the HMH Field Trip ***Carmen's Skyscraper Caper***. As students look at each scene using their viewers, read the information that appears to the class. Tap on each point of interest to direct students' attention, then share the additional information. Each scene includes a set of leveled questions that you can use to check students' understanding. At the end of the field trip, have students put their viewers down. Give students a few minutes to record notes in their charts.
3. Lead a classroom discussion about the skyscrapers students visited in the field trip. As you discuss the location and characteristics of each skyscraper, call on students to summarize the information from their notes. Ask students to explain why these skyscrapers are important, unique, or symbolic. What makes these skyscrapers iconic landmarks?
4. Organize students into groups of three or four. Assign each group one skyscraper to research. You could assign the skyscrapers from the field trip or you could assign different skyscrapers. Have each group research its skyscraper using standard sources such as textbooks, encyclopedias, reference websites, and atlases. Instruct each group to design a magazine ad by choosing engaging photographs of their skyscraper and writing a short summary describing the skyscraper's unique characteristics and significance in the world. What makes their skyscraper a place people want to visit?

Teaching Tips and Information

When introducing the lesson, you might want to explain some of the different technologies that made the building of early skyscrapers possible—steel and elevators. The creation of steel allowed engineers to build a steel skeleton that was strong enough to support more than a few building floors. Completed in 1885, the Home Insurance Building in Chicago is considered the world's first skyscraper due to its steel construction. The invention of the hydraulic elevator in the late 1800s allowed people to access higher floors quickly and efficiently. Architects soon began designing new buildings with elevator shafts.

You can have students take notes as they view the field trip. Just pause at the appropriate places and ask students to write notes in their charts.