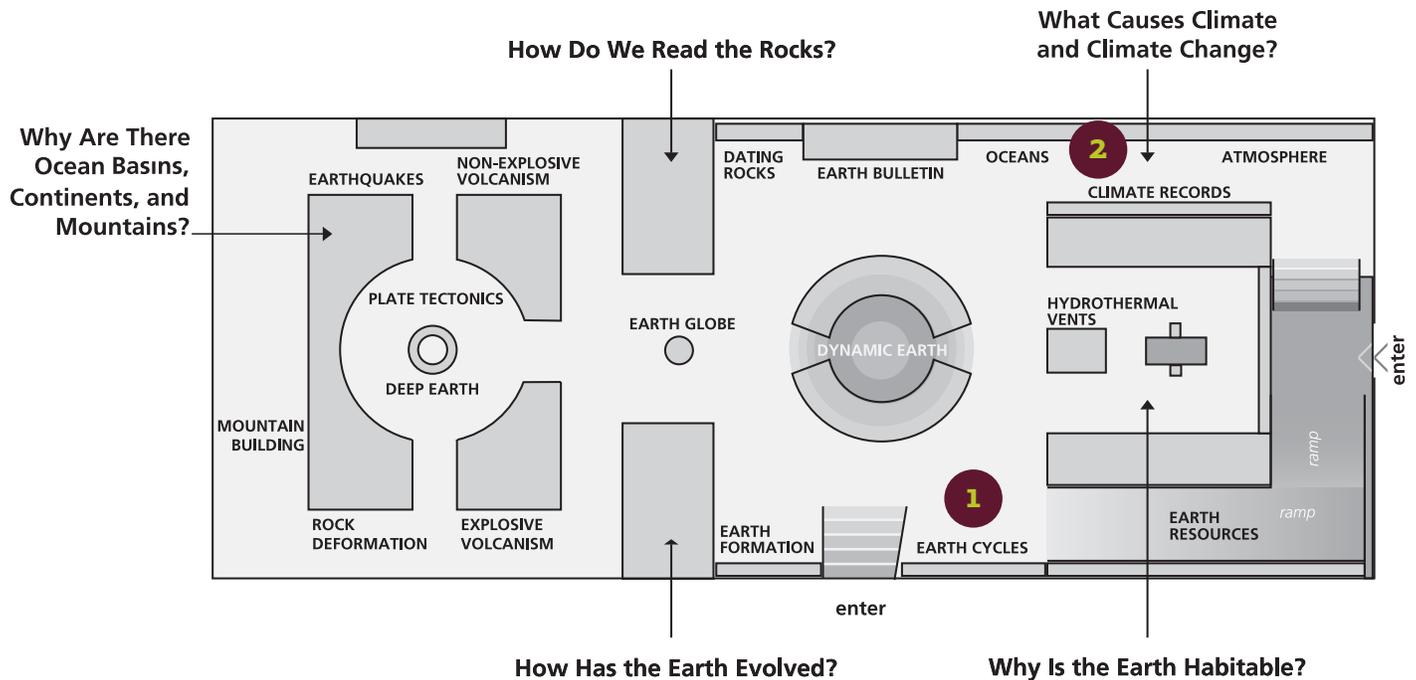


# EXPLORE CLIMATE CHANGE

## in the Gottesman Hall of Planet Earth

You can use the map and guiding questions below as you and your students move through the hall.

Students can also explore the exhibition independently or in pairs, using the Student Worksheet on the reverse of this page. Allow 10–15 minutes for independent investigation. Then gather students and ask them to share their evidence and how it advances our understanding of climate change.



### 1 Earth Cycles

Have students examine diagrams of the rock, water, and carbon cycles to learn more about their fundamental connections to the climate system.

#### GUIDING QUESTIONS:

- What connections do you see between the rock, water, and carbon cycles?
- Where does the energy come from?
- How does energy move through system?

### 2 What Causes Climate and Climate Change?

Have students explore the long panel that illustrates how solar energy circulates through the atmosphere and the ocean. They can also watch a video in the middle of the panel that explains the dramatic effects of El Niño on weather patterns. Opposite, ask students to examine the different kinds of evidence of past climate change.

#### GUIDING QUESTIONS:

- How does energy move through the atmosphere-ocean system?
- How has climate changed over time?
- How do we know how climate has changed in the past?

# EXPLORE CLIMATE CHANGE

## in the Gottesman Hall of Planet Earth

## Student Worksheet

Scientists investigate how Earth works by collecting and analyzing data. In the Gottesman Hall of Planet Earth, you can find many different kinds of data about Earth systems.

Find the **What Causes Climate and Climate Change?** area of the hall. Choose two topics that interest you, and find the evidence that supports our understanding of this part of the climate system. Record your findings below.

### Example 1

What are scientists investigating?

What tools did they use?

What are the variables?

Insert the variables:

How will \_\_\_\_\_

affect \_\_\_\_\_

\_\_\_\_\_?

Make a sketch of the evidence (e.g., map, graph, specimen).

### Example 2

What are scientists investigating?

What tools did they use?

What are the variables?

Insert the variables:

How will \_\_\_\_\_

affect \_\_\_\_\_

\_\_\_\_\_?

Make a sketch of the evidence (e.g., map, graph, specimen).