

NAME \_\_\_\_\_

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# WHAT IS SCIENCE?

## MUSEUM EXPLORATION GUIDE

### » INSTRUCTIONS

Cut pages, assemble in numerical order and staple to form a booklet. Then use your observations to complete the *What Is Science?* worksheet after your field trip.

3

### QUESTIONS

Science involves asking **questions** and developing experiments to answer them.

WRITE A QUESTION ABOUT SOMETHING INTERESTING IN THE MUSEUM.

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### OBSERVATIONS

When scientists make observations they **collect** data and **record** evidence.

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DRAW SOMETHING YOU OBSERVE.



What do you see, touch or notice?

4

### HYPOTHESIS

A **hypothesis** is an explanation to a question that can be tested with an experiment.

FIND SOMETHING IN THE MUSEUM AND DRAW IT.



WRITE A HYPOTHESIS ABOUT IT.

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Hypotheses are based on observations and things you already know.

## EXPERIMENTS

Experiments involve **testing** and **retesting** ideas to answer questions and make discoveries.

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DO AN EXPERIMENT AND DESCRIBE WHAT YOU DID.

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WHAT DID YOU DISCOVER?

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Don't worry if you make a mistake. It's part of science!



## CREATIVITY

It takes creativity and imagination to create new ideas and to answer questions.

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WRITE A NEW QUESTION, HYPOTHESIS OR EXPERIMENT.

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## INFERENCE

An inference is a **conclusion** or interpretation based on what you observe.

Example:

**Observation:** *I can see gray clouds in the sky.*

**Inference:** *I see gray clouds, so I think it might rain.*

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MAKE AN INFERENCE BASED ON SOMETHING YOU OBSERVE.

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## OBSERVATIONS

DRAW SOMETHING YOU OBSERVE.



8

# WHAT IS SCIENCE?

NAME \_\_\_\_\_

Use the information you gathered at the Museum to complete this worksheet.

HERE IS A PICTURE OF SOMETHING I OBSERVED...

AT THE MUSEUM I DISCOVERED...

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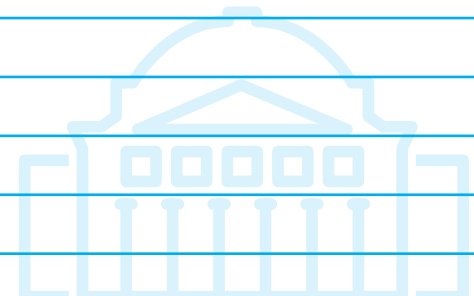
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SCIENCE INVOLVES MANY THINGS, INCLUDING...

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AT THE MUSEUM I TESTED...

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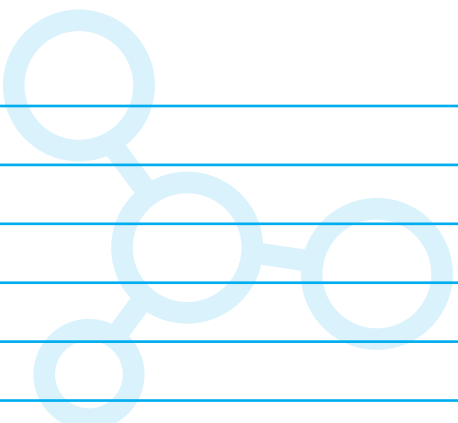
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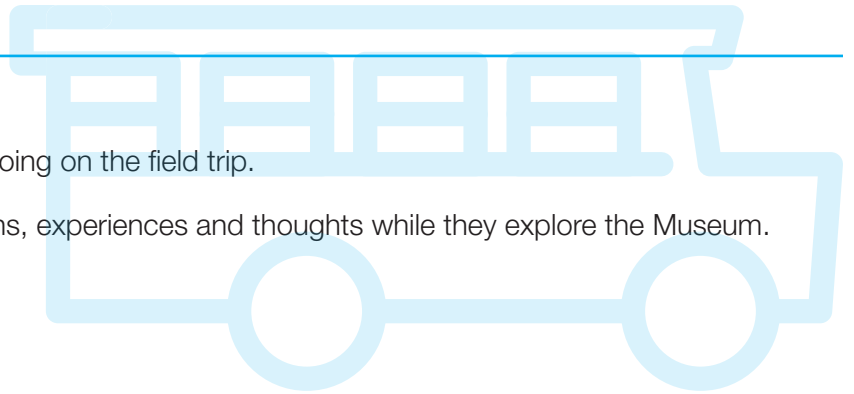


# QUICK TEACHER INSTRUCTIONS

## BEFORE THE FIELD TRIP

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1. Print an exploration guide for each student.
2. Have students assemble the guides before going on the field trip.
3. Tell students they will record their observations, experiences and thoughts while they explore the Museum.
4. Briefly review each page with students.



## DURING THE FIELD TRIP

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1. Make sure each chaperone understands what students will do. Emphasize the importance of having students complete the exploration guide.
2. Give each student their guide and a pencil. Make sure they complete it while exploring the Museum.

## AFTER THE FIELD TRIP

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1. Give each student their completed exploration guide and a worksheet if there is one. They will use their observations to complete the writing exercise.
2. Discuss all definitions and review everything they learned.

» REFER TO FULL LESSON PLAN FOR MORE DETAILS