

NAME _____

STRUCTURE AND FUNCTION

MUSEUM EXPLORATION GUIDE

» INSTRUCTIONS

Cut pages, assemble in numerical order, and staple to form a booklet.
Then use your observations to design your own invention on the last page.

2

FUNCTION

Function is the purpose of an object, or the task it is designed to do.
Find a different human-made structure in the museum.

DRAW IT BELOW.



WHAT DO YOU THINK THE FUNCTION OF THAT OBJECT IS?



STRUCTURE

Structure is the way something is arranged or built. It can be human-made or found in nature. Find something human-made in the museum.

1

DRAW THE OBJECT BELOW.



DESCRIBE THE STRUCTURE OF THE OBJECT:

3

STRUCTURE AND FUNCTION

The design or shape of something's structure is often related to its function.
For example, a building may be designed with special features to help protect it in earthquake prone areas.

Find an object in the museum that was made by humans.

DESCRIBE HOW THE STRUCTURE HELPS ACCOMPLISH ITS FUNCTION:



DIFFERENT STRUCTURES, SAME FUNCTION

There can often be different ways to do the same thing. Find two different structures in the museum that have the same function.

WHAT ARE THEY?

HOW ARE THEY THE SAME?

HOW ARE THEY DIFFERENT?



4



ENGINEERING A BETTER WAY

Sometimes engineers will improve upon an existing design to make it better.

5

FIND AN OBJECT IN THE MUSEUM AND DESCRIBE HOW YOU COULD IMPROVE ITS STRUCTURE.



6

STRUCTURE AND FUNCTION IN NATURE

The structure and function of things in the natural world are often related, too! For example, the fins of a fish help propel it through the water.

FIND SOMETHING FROM NATURE OR INSPIRED BY NATURE AND DRAW IT BELOW.

DESCRIBE HOW ITS STRUCTURE IS DESIGNED TO DO A SPECIFIC FUNCTION:

CREATE

Engineers and artists both use their creativity to find new solutions to problems.

7

THINK OF A PROBLEM YOU WANT TO SOLVE AND DRAW YOUR SOLUTION BELOW.

