

# **Himalayas**

#### **Audience**

Activity designed for ages 6 years and up.

#### Goal

Students will be able to understand how the Himalayas were formed.

## **Objective**

- To use motor skills to demonstrate how the Himalaya Mountains formed.
- To use creative skills to understand that animals live in different parts of a mountain range.

### **Conservation Message**

Asia is the largest and most populated continent. It is in the Eastern and Northern Hemispheres and covers 9% of the Earth's total surface area. Asia has extremely diverse climates, geographic features, animals, and plants. Unfortunately, the unique biodiversity of Asia is under threat because of habitat loss and overexploitation of species. You can help mitigate these threats by supporting local zoos and aquariums that participate in species survival plans and other conservation efforts.

## **Background Information**

Mountains are formed by the movement of tectonic plates in the Earth's crust. This is a very slow process and can take millions of years for mountains to form. There are 3 types of mountains: fold, fault-block and volcanic. Fault-block mountains are formed along fault lines where large rocks are forced up and some forced down, the Sierra Nevada Mountains in the western US are this type. Volcanic mountains are made by volcanic activity when magma erupts all the way to the surface and then hardens, Mount Fuji in Japan and Mount Mauna Loa in Hawaii were formed this way. The third types are fold mountains. The Himalayas are fold mountains and were formed by two tectonic plates colliding into each other.

The Himalaya range covers 1,500 miles and is home to the tallest terrestrial mountain, Mount Everest, which reaches 29,000 feet high. The Himalayas are the 3<sup>rd</sup> largest deposit of ice and snow on earth; there is around 15,000 glaciers found along its range. At the base, the bottom part of the mountains, the habitat is sub-tropical broadleaf

forests. Over 340 species of birds, tigers and Asian elephants are found here. In the middle part of the mountain, are pine and conifer forests that is home to orchids, ferns, red pandas, golden eagles, takins, and musk deer. At the top of the mountains there is very cold winters but a short mild summer for plants to be able to grow, this is area where you will find snow leopards, pikes, sheep, and hares.

#### **Materials Needed**

#### Activity 1

- 5-10 Bath Towels (different colors preferred)
- 2 Plastic Tubs

#### Activity 2

- Mountain Worksheet
- Mountain Animals Worksheet
- Crayons/markers
- Scissors

# **Length of Activity**

20-30 minutes

#### **Procedure**

#### Activity 1

- Fold each towel in half.
- Stack folded towels on top of each other. The mountain folds will be easier to see if a variety of colors of towels is used.
- Place a tub on each sides of the towel stack. The tubs represent the continental plates, and the towels represent the sediment on the ocean floor.
- Push the 2 tubs towards each other.
- Observe what happens to the towels. Can you see all the different folds and how fold mountains get their name?

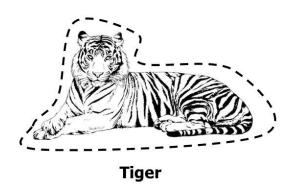
#### Activity 2

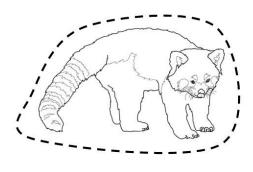
- Color the Mountain and Mountain Animals Worksheet.
- Cut out the mountain animals.
- Place the animals on the Mountain worksheet in the correct area they would be found, top, middle, or bottom.
- Check the answer sheet when complete.



# **Mountain Animals**







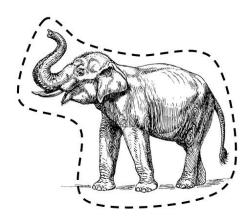
Red panda



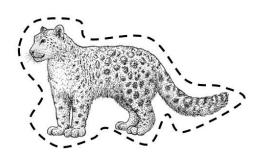
Golden eagle



Pika



Asian elephant



**Snow leopard** 

# **Answer Key**



