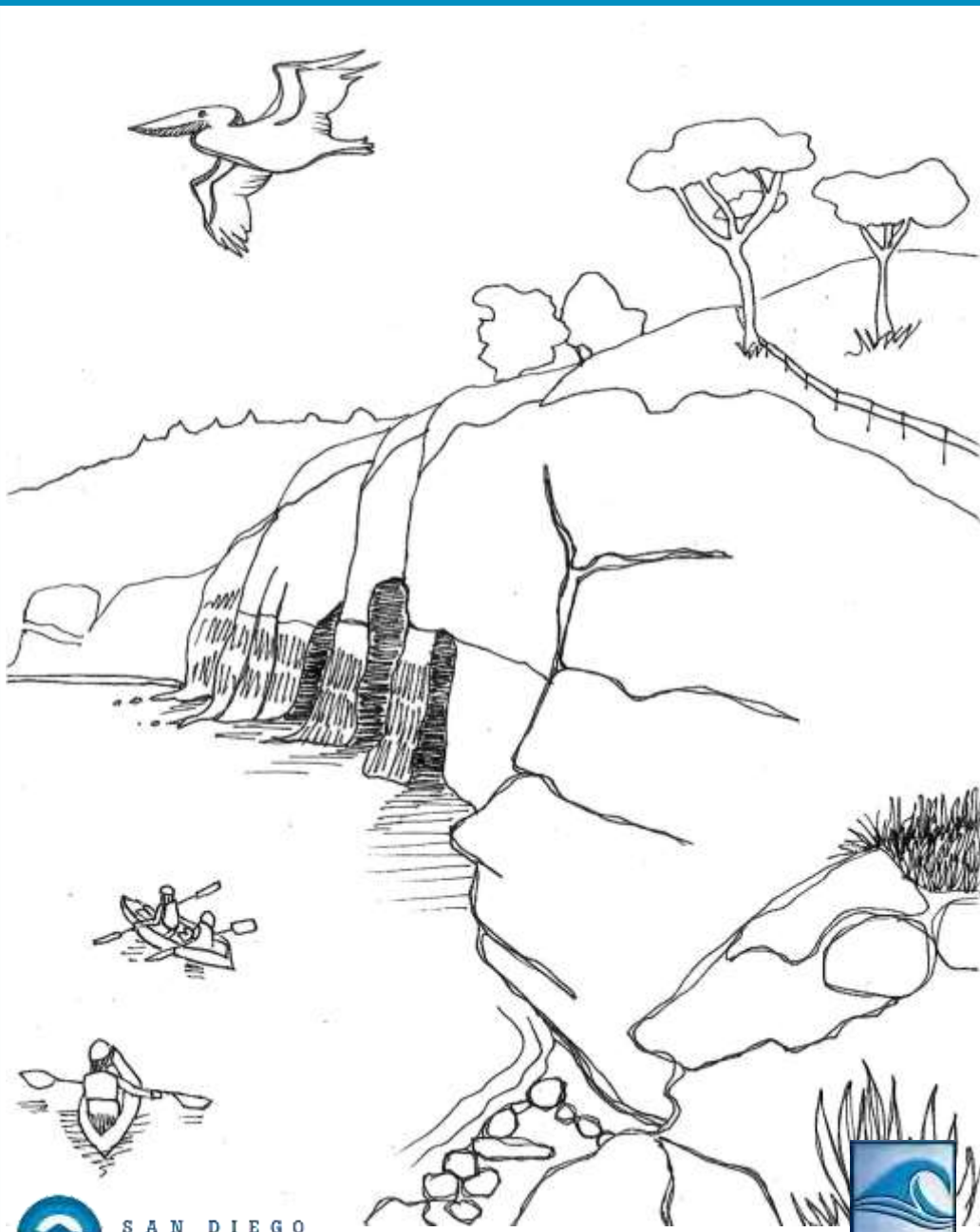


Weather & Climate Activity Book



SAN DIEGO
COASTKEEPER



think **BLUE**
SAN DIEGO

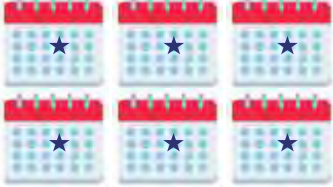
What's the Difference?

Many people talk about **weather** and **climate** as if they're the same thing, but they are different!

WEATHER VS. CLIMATE



Weather is the day to day conditions outside like rain, sun, or wind. Weather can be observed in minutes or days.



Climate is the patterns in a place's weather over a long time. Climate can only be observed over long amounts of time- 30 years or more.

Fill in the Blanks

DIRECTIONS: Use the word bank to complete the sentences.

| | | |
|---------|--------|--------|
| climate | dry | short |
| weather | winter | thirty |

_____ can be observed in _____ periods of time like minutes or days. It may look like a rain storm, a sunny day, or snow. Scientists can study a place's _____ by looking at weather patterns over _____ years or longer.

San Diego has a Mediterranean climate, which is named after a part of Europe with the same climate. This type of climate has a warm, _____ summer and a mild, wet _____.

Word Search



DIRECTIONS: Help us find the words below.

Temperate

Rain

Tropical

Wind

Sunny

Cloudy

Patterns

Precipitation

Temperature

H W F A X R A I N Y T F D W F
S N C P J T X V C L E T R G Z
U W M R Q X D N O C M S H I H
N A R E Q B W J B E P J U F T
N L Y C I C X L R W E T X N R
Y Z F I C F T T A O R U T U O
H M A P T S D T X E A V M C P
T R R I E Y F A Z E T Q Q L I
E I Z T M W E X N O U F W O C
L A M A P V W W U V R R X U A
W Z I T E W I K G S E P V D L
M H X I R I N K B V Z N K Y F
K J H O A N D H H P T X Y K H
U C Q N T U K N G E Z W M L Z
Q D Y B E U Z P A T T E R N S

Climate Around the World

DIRECTIONS: There are other places in the world with a climate like ours. On the map below, color in the outlined areas that have the same climate as San Diego.



Look at the table below. Do you think San Diego and Valencia (a city in Spain) have very similar or very different climates?

| Month | Temperature in San Diego (°F) | Temperature in Valencia (°F) | Month | Temperature in San Diego (°F) | Temperature in Valencia (°F) |
|-------|-------------------------------|------------------------------|-------|-------------------------------|------------------------------|
| Jan | 66 | 60 | Jul | 76 | 86 |
| Feb | 66 | 62 | Aug | 77 | 86 |
| Mar | 67 | 66 | Sep | 77 | 82 |
| Apr | 69 | 70 | Oct | 74 | 75 |
| May | 69 | 73 | Nov | 70 | 68 |
| Jun | 72 | 80 | Dec | 66 | 62 |

Climate Postcards



DIRECTIONS: Imagine you have a pen pal in Valencia, Spain who is visiting San Diego for the first time. On the back of the postcard, write 2-3 sentences about San Diego's climate. How is the climate similar to or different from where they live? What clothes should they bring? Then, on the front of the postcard, draw a picture of weather they might experience.

| | |
|-------------------------|--|
| Dear _____, | A red heart-shaped stamp with a scalloped, gear-like border. |
| | <hr/> <hr/> <hr/> <hr/> |
| From, _____ (your name) | |

Draw your picture here ↑

Amazing Adaptations

An **adaptation** is a trait that helps an organism survive in its habitat. Many of San Diego's plants have adapted to our climate. Because summers are usually warm and dry, plants need to stay cool and save water.

DIRECTIONS: Draw a line from the adaptation to the picture it matches.

This plant's leaves fold like a taco, giving shade that keeps the plant cool



This plant's thin, needle-like leaves don't lose as much water as big leaves



This plant has white leaves that reflect sun, keeping it cool



This plant's leaves and berries have a waxy coating that holds in water



This plant stores water in hollow spaces in its oval shaped "pads"



Design a Plant



DIRECTIONS: Plants adapt to the conditions of the climate where they grow. Choose at least 2 of the adaptations below, and then draw your own imaginary plant that is specially adapted to San Diego's climate. Make sure to label the adaptations you chose.

ADAPTATIONS:

white color

thin, needle-like leaves

hollow area for water

A large, empty rectangular box with a black border, intended for drawing a plant adapted to San Diego's climate.

DID YOU KNOW?

San Diego is getting warmer over time. As temperatures go up, scientists say that we will experience:

- More droughts (periods of time with less rain than normal)
- Ocean levels getting higher
- More hot days
- More wildfires

The more the temperature rises, the more this will affect people, plants, and animals.

PLEDGE FOR OUR CLIMATE

Now that you have learned about weather and climate, you can take action to make a difference. Sign the pledge and then color in the badge. Thank you for being a climate helper!

I promise to care for our climate. I will help by:

- Walking, taking the bus, or riding a bike as much as I can
- Turning off the lights when I'm not in the room
- Switching from plastic items to reusable ones
- Learning more about what I can do to help the environment
- Sharing what I know with others.

Signed,

(your name)

