

Junior Ranger California-Zephyr

An explorer's activity guide onboard Amtrak®



The Flatirons are rock formations located near Boulder, Colorado. These sandstone rocks are the remnants of a mountain range that pre-dated the Rocky Mountains that you see from this train!

BECOMING A JUNIOR RANGER

Welcome aboard the California Zephyr train! You are about to embark on the journey of becoming a National Park Service Junior Ranger.

As a Junior Ranger, your mission is to:

EXPLORE: You will see a lot of exciting and important landmarks during your trip today. Be on the lookout for opportunities to explore the train and what you are seeing outside of the train!





LEARN: Find out how much you can learn during your trip by completing activities in this booklet, but your journey does not end here! Junior Ranger programs are offered aboard many Amtrak trains and in most of the 417 National Park Service units across the United States of America.

PROTECT: Did you know that riding on a train is better for the Earth than driving a car? One of the jobs of a National Park Service Ranger is to protect the land and animals in our country. By riding on this train and

learning about the land and wildlife, you too are helping protect our environment and country.



WHAT'S NEXT?

There are many activities located within this booklet to help you learn more about the train you are on and the environments that you are traveling through. Wherever you see this symbol there is an activity for you to try! Try to complete as many activities as you can! When you complete the same number of activities as your age, take this book to one of the Trails & Rails Guides in the lounge car of the train that you are on. The train guides are also available to help you complete these activities!



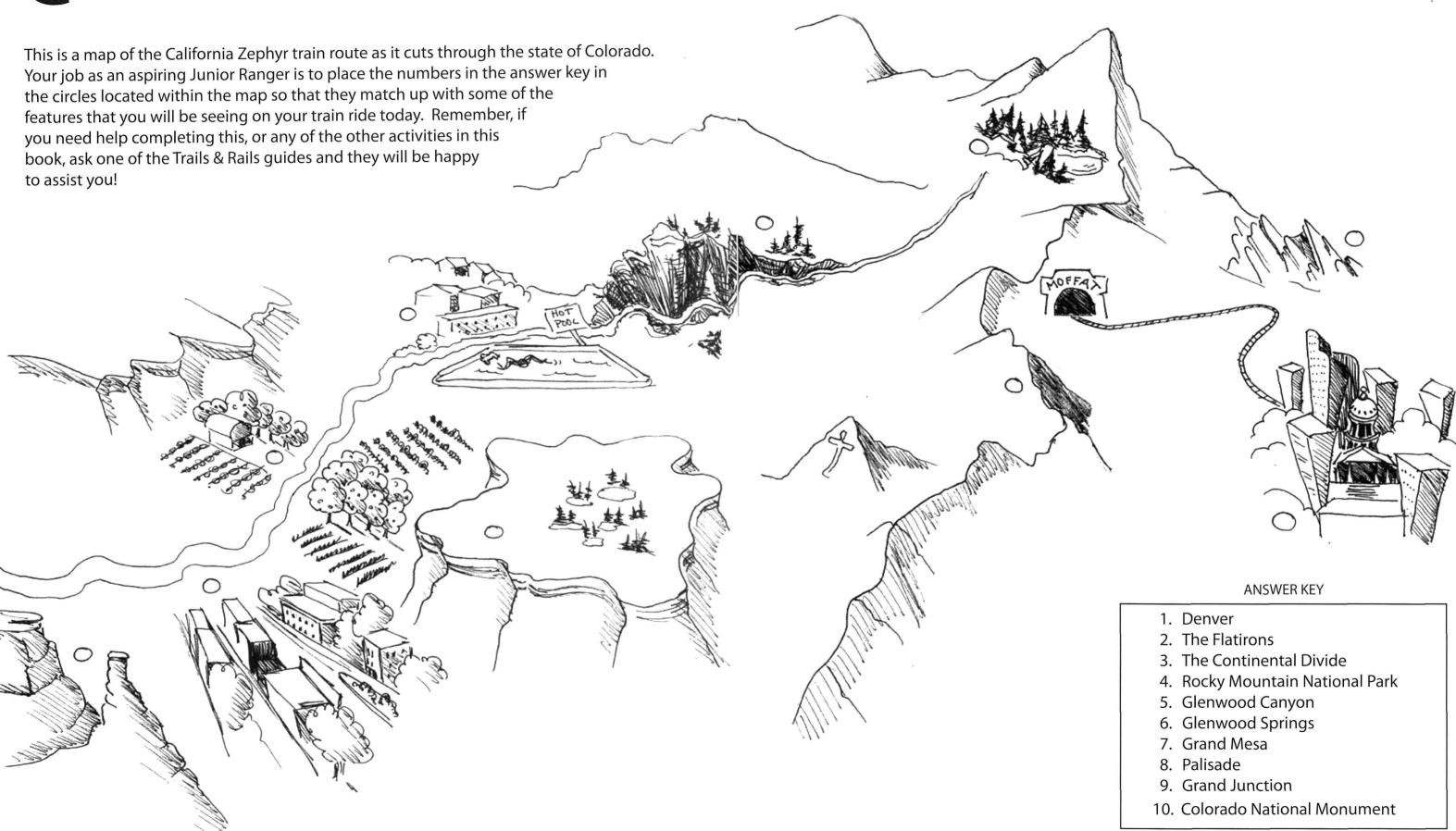
Hey there! My name is Sammy the Squirrel and I am a passenger on the California Zephyr train, just like you! I ride the train so that I can teach people about the cool places they travel through. That's because I also help with the Trails & Rails program, which provides educational opportunities for passengers on board trains. I have learned a lot about Colorado and would love to share some of what I know with you!

This booklet has a lot of fun activities that will teach you about the California Zephyr route as it passes through the great state of Colorado. Are you ready to learn about the California Zephyr?

Let's Get Started! Use the map below to fill in the blanks!

The California Zephyr is a long tr	ain route that ti	ravels daily bety	ween the cities o	of
Illinois and,	California. The	California Zepł	nyr route is over	2,400
miles long, and takes about 52 h	ours to comple	te! It goes throu	igh 7 states:	
			, and	It also
passes near many cool cities and	national parks.	. These cities in	clude	_, Nebraska
and, Utah. You w	ill also see Rocl	ky Mountain Na	ational Park in Co	olorado
(specifically Long's Peak) if you a	re going to or c	oming from De	nver.	





You will see so many things on your train trip from Denver to Grand Junction. We ask that you not only look for a special object, but that you also describe what you see. When you spy an object below put a check or X in the box next to it. For a bigger challenge, try to describe the items you spy. Try and do as many as you can and have fun!

	a person fishing - What color was his or her shirt?
	a raft - How many people were in the raft?
	a rapid in the river - Which side of the train?
	a dam - What color was it or what was it made of?
	gondola cars filled with rocks - What was unusual about them?
	a reservoir - Which side of the train or where was it?
	a canyon - What type or color of rocks were on the sides of the canyon?
П	a school house - What color was it or what was it made of?
П	the entrance to the Moffat tunnel - What color was the entrance?
\Box	a dog - What color was it and how big was it?
$\overline{\Box}$	a wind generator - On which side of the train and was it turning?
	a slide fence that goes over the top of the train - How many wires?
	a railroad bridge - What was it going over?
	a car bridge - What went under it?
	a railroad tunnel - About how many seconds were you inside the tunnel?
	a car tunnel - How many lanes of traffic went into the tunnel?
	a coal train - How many cars or how many engines?
	a flag - What kind or what color?
	a hotel - Where or what was it made of?
	a rifle range - About how many targets?
	a water wheel - Which side of the train?
	a telephone pole - How many wires was it supporting?
	a railroad maintenance crew - What were they doing?
	a bird - What kind or color?
	a wild animal - What kind or size or color?
	a person - What was he or she doing?
	For the Super Spies!
	tunnels: How many between Grand Junction & Denver?
	train station stops: How many between Grand Junction & Denver?
	cars: How many through Glenwood Canyon?
	motorcycles: How many through the entire trip?



Trails & Rails guides ride along with you on the California Zephyr route between the cities of Denver and Grand Junction. Denver is the capital city of Colorado, which became a state in 1876.

Complete these fun facts by unscrambling the words below them. If you have trouble, use the pictures or the Trails & Rails guides to help you.

Fun Fact #1

Denver has one of the largest _____ systems in the nation with 86% of residents living within a 10-minute walk of a park.



TCYI KRPA

Fun Fact #2

Denver claims the invention of this sandwich. The trademark for the name was awarded in 1935 to Louis Ballast of Denver.



HEBGERCEUSER

Fun Fact #3

The 15th step of this building is exactly one mile high: 5,280 ft. This is why Denver is often referred to as "The Mile High City".



OPLCATI

Fun Fact #4

Thirty-two _____ over 13,000 ft. and two over 14,000' can be seen from Denver.



SNMUTOIAN

Fun Fact #5

Colfax Avenue in Denver is the longest continuous _____ in America.



TRESET

Fun Fact #6

This baseball team opened on April 9, 1993 before 80,277 fans, the most ever to witness an opening game in baseball history.



ISRCOEK



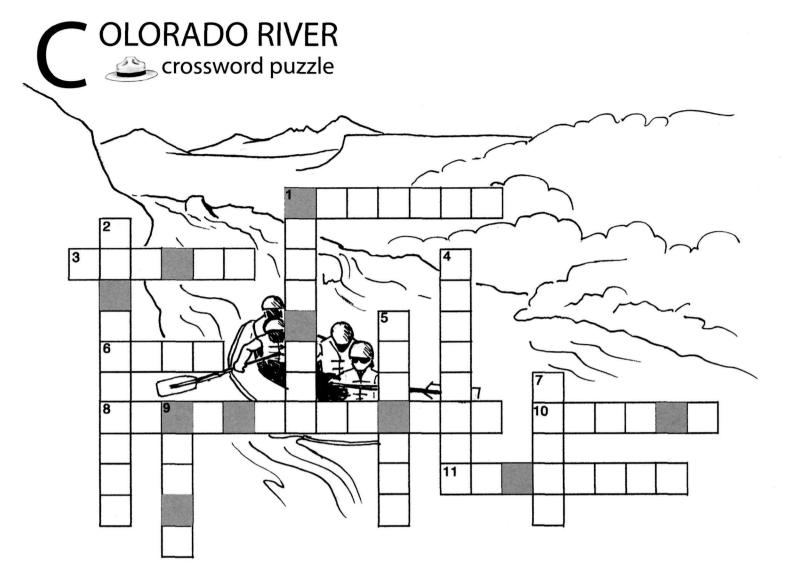
The Flatirons are rock formations located near Boulder, Colorado. These sandstone rocks are the remnants of a mountain range that pre-dated the Rocky Mountains that you see from



ONTINENTAL DIVIDE decodinggame

Historically it was very hard to cross the Colorado mountains. This story explains some of the problems and how the problems were solved. Use the chart below to fill in the blanks in the story!

		•	2		-		Before the tunnel it took almost six hours to go over Rollins Pass and	
	1	2	3	4	5	6	now it takes about minutes to go <i>under</i> F5 F4	
A	Z	Y	X	W	V	U	Rollins Pass. Although this makes for an easy trip, the coach doors must be kept closed while the is in the	
В	Т	S	R	Q	P	О	A1 D4 B5 D1 A2 B3	
C	N	M	L	K	J	I	tunnel because bad will enter the coaches. D3 A6 C2 D4 B2	
D	Н	G	F	E	D	C	Large help to remove the fumes from the tunnel. D3 E2 C1 B2	
E	В	A	9	8	7	6	It took years to dig the tunnel. A train with 40 freight cars	
F	5	4	3	2	1	0	would have to make about trips to remove the	
							F5 E6 F6 F6 rocks from the tunnel. The tunnel is _ miles long	
	520						C2 B6 D3 D3 E2 B1 E5	
and	it pa	asses	und					
D6 I	 36 C1	B1 C	6 C1				B D5 C6 A5 C6 D5 D4	
Rai	n or	snov	v tha	t fal	ls on	the	side of the Continental Divide flow into the	
							D4 E2 B2 B1	
	 31 C3					cean	. Rain or snow that fall on the West side of the Continental	
Div	ide f	lows	into	Pac			There is a place in Mountain National B3 B6 D6 C4 A2	
Par	k wh	ere	you (can e	easily	ster	across a small stream that eventually becomes the	
				Colo	-	_	er that is enough to cut through rock	
	6 D2						B2 B1 B3 B6 C1 D2	
to f	orm	the b	eau	tiful			Canyon in Grand Canyon National Park.	
The	Col	orad	o Ri	ver i			C1 D5 Int because it provides water for 20 people.	
Mu	ch of	this	wat	er co	mes	fron	c2 C6 C3 C3 C6 B6 C1 n snow fall that can reach 8 However,	
				1.			D3 D4 D4 B1	
	_ — СЗ В6						could cause less snow to fall and long	
					_			
D5 1	33 B6	A6 I)2 D1	BLE	32			
cou	ld be	com	e coi	nmo	n. I	t is i	mportant for young people like to care for A2 B6 A6	
and	keep	oui	· Na	tiona	ıl Pa	rks _	and so	
		c	hild	ren (an e		D6 C3 D4 E2 C1 E1 D4 E2 A6 B1 C6 D3 A6 C3 them too!	
X	A2 B6 A6 B3							



ACROSS

1	The force of	the river	has created deep	
---	--------------	-----------	------------------	--

- 3 An extremely fast-moving part of a river
- 6 The Colorado River flows through how many states
- 8 The headwaters of the Colorado River are in this National Park
- 10 This type of dam helps prevent erosion
- 11 The Colorado River passes through _____ Canyon

DOWN

- 1 The Colorado River flows through which state first
- 2 The Colorado River ends at the Gulf of
- 4 Overflowing river water causes _____
- 5 A popular recreational activity on the flowing river
- 7 Original name of the Colorado River
- 9 Rate of water flow is measured by _____ feet per minute

WORD BANK

rapids

California

four

Rocky Mountain

cubic

roller

Grand

Glenwood

flooding

canyons

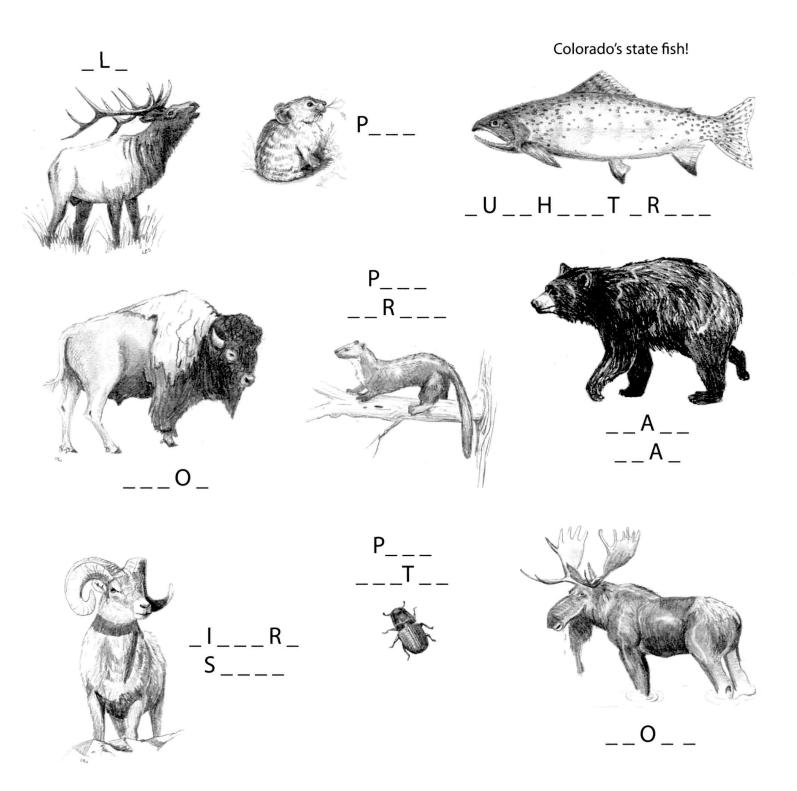
rafting

Colorado

Use the letters in the shaded squares to unlock the secret word! Note: One letter is used twice. Hint: A dam in Glenwood Canyon helps the Colorado River produce: ______

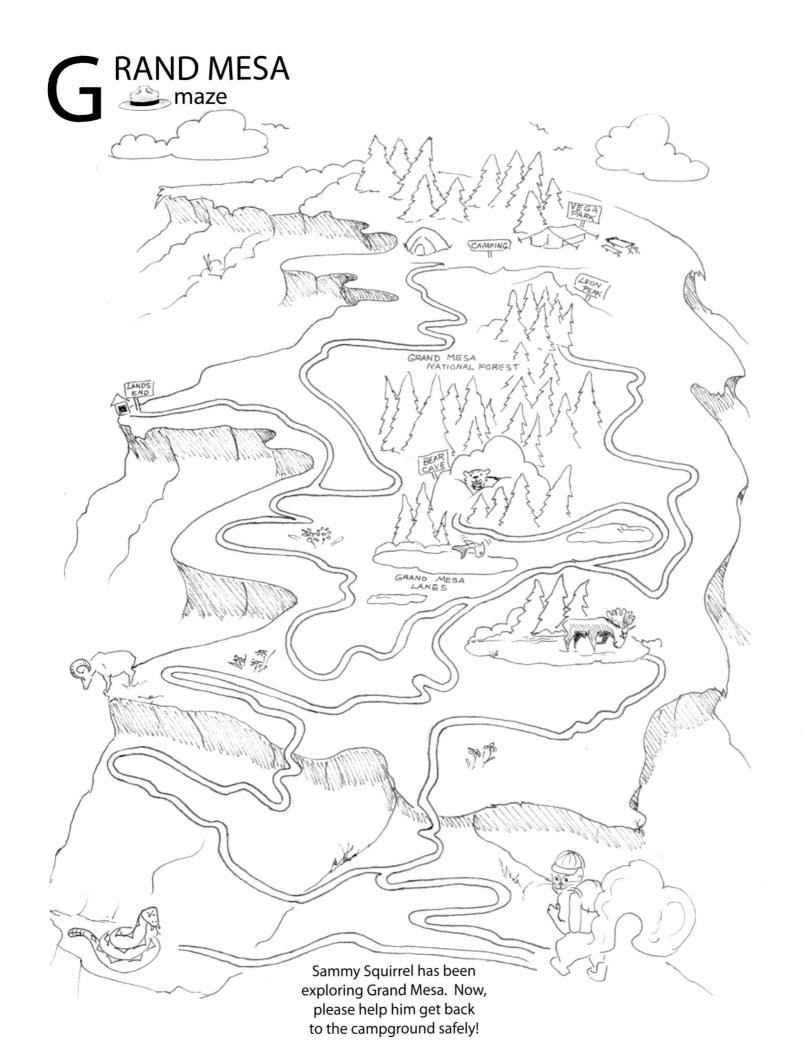
OLORADO WILDLIFE fill-in the blanks

The train passes through three different areas which provide food and homes for a wide variety of animals. We travel the high plains, the Rocky Mountains and into the Colorado Plateau, each of which provides unique opportunities for animals to survive. The animals range from very small (pika, pine beetle, pine martin) to very large (moose, bear, and elk). Look closely, and if you're lucky you might see wildlife today!



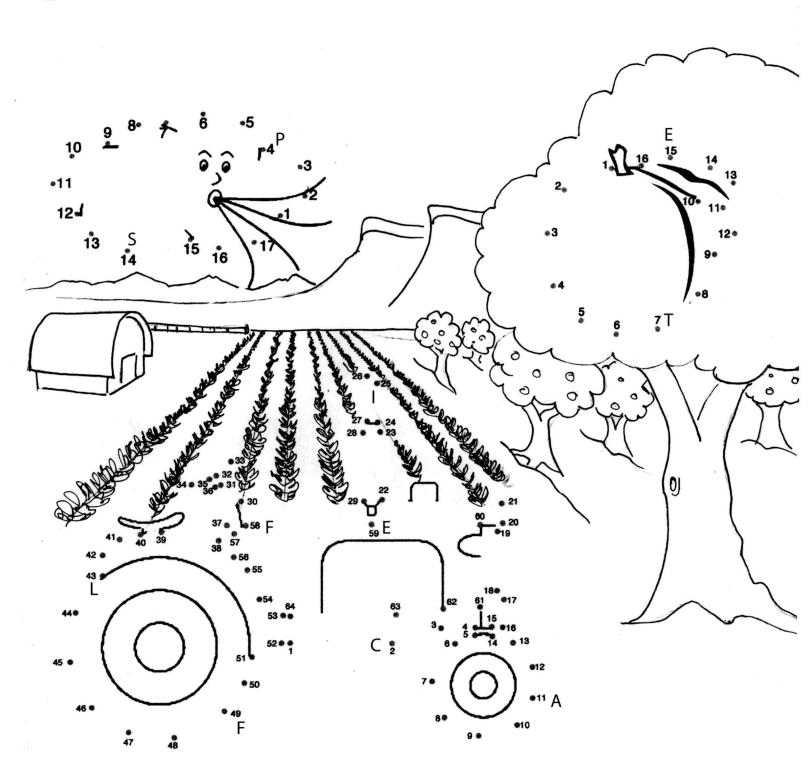


Glenwood Canyon is one of Canyon was formed a coup formed the Grand Canyon feet high.	ole million years a	go by the	Rive	er, which also	
The railroad that you are or must pass through this car likelihood that the new hig to minimize the completely separate traffic offset Funusual	nyon in close prox hway would dam , special de :, u from the train, you	rimity. There wa age theesigns were used unusual tunnels,	s a lot of conce and seren I for this road, and raised sec	ern about the ity of the canyon, so including building tions supported by	
As you head west through	Adventure	Fairy	lanes	photographers	
the canyon you will see an exit for Hanging	Aspen	feet	museum	pillars	
, which is	beauty	hiking	Native	Roosevelt	
a favorite destination for The	Colorado	Hot Springs	nassengers	impact	
shoreline of Hanging Lake is composed of	construction	Lake	path	_	
, which gives the lake water an	12.5	1,300	vapor	waterfalls	
incredible green color. The area very popular with an elevation gain of 1,000		•			
Glenwood Springs is a very have come here ever since hot caves. Across the Pool and the Hotel Colorachere, and some say the Technology.	e river is the famo do, completed in	Americans disco ous Glenwood _ 1893. President	vered the min	eral springs and	
Just west of the Glenwood Glenwood Springs Caves. Glenwand a nearby ski area. It is mountain towns and resor	Park that ood Springs has p also the jumping	t features Glenw oopular hotels ar off point for	ood Caverns, and motels, rest	also know as the aurants, shopping, and other popular	





Known as the "banana belt," Palisade is famous for the many fruits grown here. Compressed air from Debeque Canyon warms the air to create an ideal growing climate.



Palisade means:

11	14	7	59	15	4	2	43	25	49	58

G RAND JUNCTION word search

Grand Junction is located where the Colorado and Gunnison Rivers merge. The Bookcliffs are to the north, Grand Mesa is to the east and the Colorado National Monument is to the south. Many dinosaur species have been unearthed in the area. You can also study dinosaurs in a local museum. There are a variety of biking and hiking trails and many weekends there are festivals and special events. The area is prime for growing many kinds of fruits and vegetables. Uranium, shale oil and natural gas development are part of its history. And the local people love to climb aboard Amtrak for transportation to places both east and west.

R	J	A	\mathbf{C}	G	В	A	Q	A	M	T	R	A	K	W
D	K	R	G	\mathbf{S}	P	J	H	A	G	P	N	T	M	P
S	J	A	Н	R	Y	M	Н	X	\mathbf{S}	Q	T	U	Y	D
I	В	I	F	\mathbf{Z}	I	K	E	L	P	T	G	T	N	D
W	\mathbf{X}	L	C	X	F	C	A	S	\mathbf{S}	L	Ι	E	В	Z
X	В	R	J	C	L	V	U	R	A	S	K	C	N	N
I	M	O	X	O	I	R	U	L	R	K	M	P	N	A
F	T	A	O	T	X	A	Y	E	T	U	G	X	L	T
J	K	D	S	K	S	I	V	V	I	U	T	Y	M	Y
В	Ι	E	G	Ο	C	Ι	T	N	\mathbf{Z}	R	R	X	T	A
D	F	T	N	F	N	L	A	R	N	F	D	E	A	T
V	G	I	U	U	G	R	I	V	A	T	H	V	\mathbf{S}	Y
I	D	C	V	D	U	W	E	F	Ο	I	L	Z	K	Η
M	O	N	U	M	E	N	T	L	F	E	L	R	N	G
A	D	T	T	Ι	M	Ι	G	Q	I	S	\mathbf{E}	S	T	A

Word Bank

AGRICULTURE	TRAIL	S BO	OKCLI	FFS	DINOSAURS	
FESTIVALS	MESA	RAILROAD		UNIVERSIT	Y UTE	1
	MONUMENT	URANIUM	OIL	AMTRAK		

Let's see what we can learn about one of the upper portions of a passenger car on the California Zephyr. Complete as many items below as you can!

1.	How many stair steps does it take to get from the bottom part of the passenger car to the top part of the car?
2.	How many windows are in the car? Don't forget the windows in the doors!
3.	How do the windows make the passenger car safer?
4.	Name two ways to open the doors at the end of the car
5.	How many fire extinguishers are there on a passenger car?
6.	How many trash bins are there on a passenger car?
7.	How many passengers can be seated in a passenger car?
8.	How many wheels are on a passenger car? You can watch other cars on a curve and count the number of wheels, ask the conductor, or ask a Trails & Rails Guide
9.	How many cars, including the engine, make up the California Zephyr? You can watch other cars on a curve and count the number of wheels, ask the conductor, or ask a Trails & Rails Guide
10.	When you take two big steps you move about five feet. Use your steps to measure the approximate length of the inside of the car in feet
11.	What is the approximate width of a passenger car?
12.	If it takes approximately 14 minutes to go through the Moffat tunnel and the tunnel is approximately 7 miles long. What speed is the train traveling in miles per minute? Hint: Speed = Distance \div Time
13.	How far would the train travel in 60 minutes at tunnel speed? Hint: Distance = Speed x Time in 60 minutes
14.	How many miles per hour was the train traveling through the tunnels? Hint: How many minutes are there in one hour?
15.	What does the word "Zephyr" mean? Ask several passengers if they know.
16.	Close your eyes for a few minutes (don't go to sleep) and note the sounds, smells and motions of the train. Describe your observation in three or more sentences.
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\[\lambda	

A NSWER KEY

Overview

Chicago, Emeryville, California, Nevada, Utah, Colorado, Nebraska, Iowa, Illinois, Omaha, Salt Lake City

Fun facts

City Park, Cheeseburger, Capitol, Mountains, Street, Rockies

Decoding game

12, Zephyr, fumes, fans, 6, 1600, Moffat, 7, Continental Divide, East, Atlantic, ocean, Rocky, mighty, strong, Grand, million, feet, global, climate change, droughts, clean, beautiful

Crossword puzzle

Across: 1. Canyons 3. Rapids 6. Four 8. Rocky Mountain 10. Roller 11. Glenwood

Down: 1. Colorado 2. California 4. Flooding 5. Rafting 7. Grand 9. Cubic

Fill-in the blanks

Elk, Pika, Cutthroat Trout, Bison, Pine Martin, Black Bear, Bighorn Sheep, Pine Beetle, Moose

Story with word bank

Colorado, 12.5, 1300, path, beauty, impact, lanes, pillars, construction, lake, hiking, travertine, waterfalls, photographers, feet, passengers, Native, vapor, Hot Springs, Roosevelt, Adventure, Fairy, Aspen, Museum

Connect the dots

A steep cliff

CERTIFICATE OF COMPLETION

This certifies that

has completed all activities for the



*California Zephyr*Trails & Rails Award



and is hereby granted the offical title of

National Park Service Junior Ranger

Junior Ranger Pledge:

"I promise to discover all I can about the special places protected by the National Park Service and share my discoveries with others. I pledge to enjoy and protect the plants, the animals, and the historic places of my country."

Junior Ranger Signature & Date

Trails & Rails Guide Signature & Date