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Where: Confluence Park on Water Street, between Ocean Journey and REI.

What:

When:
Why:

How:

Your Attention Please: Ron Robinson and Angela Azimuthal helped establish Denver in 1858 along the South Platte River. Their canoe overturned and they received a nasty knock on their collective heads. They have just awakened and found themselves in the $21^{\text {st }}$ Century. Can you help them understand the landscape and transportation modes of modern-day Denver?

Be the first to find 1 "real" geocache and 25 virtual geocaches and answer 42 challenging questions created by Joseph Kerski of the USGS and Esther Worker of ESRI during our Geocaching Adventure for GIS in the Rockies. Take Water St - 23rd Ave Exit off I-25. 39.75293 North, 105.01138 West

Friday 23 September 2005, at 9:00 am sharp!
To practice using a GPS, to network with your GIS colleagues, to win fabulous prizes, and to do some fun geographic fieldwork!

Participate individually or bring a team from your workplace!


## Clockwise Version

"That was rough!" exclaimed Ron Robinson as he and Angela staggered out of the water. "Our canoe must have hit a rock and knocked us out! Here's the river, and I recognize this embankment, but there's much that I don't recognize."

They found themselves at a sign at 39.75293 North, 105.01138 West. "What is this newfangled motion machine?" puzzled Angela. What is the number they saw on the bicycle route sign? (1a)
"Let's explore a bit," proposed Ms. Azimuthal. "We can't just look at one point."
"Right, " agreed Ron, "because someday a band called Three Dog Night might sing a song entitled, "One is the loneliest number that you'll ever (1b) "

## Set a waypoint here.

The two walked at a 55 degree heading. At 39.75358 North, 105.01052 West, they found a sign. What did it say? (2a)
"This is the same river that we were canoeing in," said Angela. "It changes names many times on its course to the Gulf of Mexico. The first time it changes its name downstream from here is in 265 miles ( 426 kilometers) near the community of (2b).

The two walked to 39.75466 North, 105.00894 West.
"It looks like Chatfield Dam was built in (3)," remarked Ron with a slow whistle. "That must mean we're in the future! I wonder if the Dam has prevented future floods along the river like we kept experiencing in the $19^{\text {th }}$ Century."

Next, the two journeyed to 39.75483 North, 105.00885 West to a building that looked more familiar to their $19^{\text {th }}$ Century eyes. "Not quite," remarked Angela, looking at the sign. "This building was constructed in (4)."

When they reached 39.75548 North, 105.00806 West, they found themselves at a large structure. "These sure don't look like it is used by horses," the two remarked. "I wonder what kind of transportation they use in the $21^{\text {st }}$ Century?" What street were they looking at? (5)

At 39.75528 North, 105.00805 West, the two were facing the confluence of two rivers that meant so much to the founding of Denver. What stream was flowing in from the southeast? (6)

## Take note of your elevation here.

Next, the two companions read the information at 39.75483 North, 105.00847 West. "It looks like the original viaduct was made of (7)," said Ron. "But I wonder who Shoemaker was?"

When they reached 39.75508 North, 105.00821 West, Angela answered him:
"Shoemaker was (8a)."

When she said this, how far below point (6) were they now standing? (8b).
The two walked to 39.75676 North, 105.00690 West. "If I could save time in a bottle," said Ron, "I'd float it to Globeville. "It is (9a) miles to the Globeville Landing," read Angela on the sign. "Should we keep walking?"
"No, let's walk up these stairs," suggested Ron as he read the name of the Mortuary sign. What name was he reading? (9b)

How many poles supporting the shade canopy did the two find at 39.75592 North, 108.00640 West? (10)
"I'm glad to see that the $21^{\text {st }}$ Century folks didn't pave everything," said Ron. "I still don't see any horses, but I can name several tree species here." Name two tree species that Ron found at 39.75533 North, 105.00710 West. (11)
"Look at this newfangled contraption," they exclaimed at 39.75432 North, 105.00807 West. What was the purpose of this contraption? (12a)
"Development comes at a price, though," remarked Angela. What can't you do when the contraption is in the upright position? (12b).

While at 39.75397 North, 105.00887 West, the two gazed west at the grandest new form of transportation yet, marked by a road sign. "What does I- 25 mean?," they wondered aloud. "I bet they sure can travel quickly on that road on any type of horse."

I-25 North now points to Fort Collins. During the late 1980s, however, all of the I-25 North signs along the Front Range used to point to another city. What is the name of this city? (13a).
"I wonder what two cities mark the southernmost and northernmost ends of I-25?" pondered Angela. How would you answer her? (13b)

Continuing south, the two remarked, "We're under yet another of those avenues for the unknown transportation mode." What street did the two pass under? (13c)

After passing under the street, the two stopped at 39.75348 North, 105.00960 West. "These orange objects would have been a real help in the $19^{\text {th }}$ Century," sighed Ron. What is the purpose of the orange objects? (14)

The two wandered to 39.75256 North, 105.00998 West. "Now here is a plant that I can still recognize from our century," said Angela. Its common name is (15).
"Now this is a transportation mode that I definitely do not recognize," Ron said as he gazed upward at 39.75011 North, 105.01371 West. What is the street where this amusement park was formerly located? (16a)

What is the name of the roller coaster at a heading of 190 from the spot where they were standing? (16b)

What was the name that the two discovered at 39.74659 North, 105.01523 West? (17a). Did this lead them to believe that this area's plants are irrigated or not? (17b)

The two walked to 39.74292 North, 105.01616 West. How far were they from their starting waypoint? (18)

When they arrived at 39.74315 North, 105.01666 West, they both stood in awe. "I finally see a horse!" exclaimed Ron. "He's not living, though" replied Angela. Name the 6 different years when the Sports Team whose home is in this object went to the Super Bowl. (19a).
"Now look at this!" shouted Ron. "I do recognize this type of transportation." In 2005, what now runs on the track that is near the spot where Ron and Angela were standing? (19b)

Ron and Angela then walked to 39.74560 North, 105.01624 West. "At least we know we're still in Colorado. This is so beautiful that it should be the state tree!" they rejoiced in awe. What was it? (20)

The two then set out to find the Blue Monkey Cache from geocaching.com, specifically, on: http://www.geocaching.com/seek/cache details.aspx?ID=286439. Remember that this is an artificial object placed somewhere on the landscape by people engaged in geocaching with GPS.

This cache is located at 39 Degrees, 44.808 Minutes North, 105 Degrees, 01.007 Degrees West.

When you find the Blue Monkey Cache, be sure you put it back exactly the way you found it.
"I don't recognize the material that the cache is made of," said Angela, "but I know why it is called the Blue Monkey Cache." Why is it called the Blue Monkey Cache? (21)

Next, the two made their way to the name marked at the point 498568 Easting, 4399832 Northing. "Now we're really lost," they said with despair. What was the name of the country they found at this spot? (22a)

What UTM zone were they in? (22b)
What is the central meridian of this zone? (22c)
What cardinal direction is the central meridian from the spot where they were now standing? (22d)
"Check that off!" they exclaimed as they ran to the next spot at 39.74937 North, 105.01631 West. What is the nickname of the state where this equipment was manufactured? (23a)

How many slides are in a 30 meter radius of this spot? (23b)

Angela and Ron walked next to 39.75068 North, 105.01452 West, and found a railroad plate that was forged during a year in the first third of the $20^{\text {th }}$ Century. Who was President when this plate was made? (24a).

Next, the two took advantage of the opportunity by singing the Roger Miller song about the railroad, which includes the line "third boxcar, midnight train, destination Bangor Maine, old worn out shirt and shoes, I don't pay no union dues." What song were they singing? (24b)

The two then observed the plant to the west of 39.75148 North, 105.01322 West. This plant produces orange flowers in late summer," said Ron. What is the common name for this plant? (25)
"This is mysterious!" said Angela while looking at the $5^{\text {th }}$ bronze drop from the left in the second bronze layer in the wall at 39.75246 North, 105.01327 West. "I wonder where this river is?" What river was she reading? (26)

When the two returned to the sign at 39.75293 North, 105.01138 West, they found that they had gone a distance of (27).
"Well, we're still stuck in the $21^{\text {st }}$ Century," said Ron Robinson, "but we have learned a great deal about the different modes of transportation and a bit about our future descendents."
"I still wonder about that horse on the wall of the stadium, though," replied Angela Azimuthal. "I wonder if that team is any good."
"At least we know that geographic tools will continue to be important in the future!" they agreed with a yippi-ti-yi-yo as they walked off into the sunset.

## Counterclockwise Version

"That was rough!" exclaimed Ron Robinson as he and Angela staggered out of the water. "Our canoe must have hit a rock and knocked us out! Here's the river, and I recognize this embankment, but there's much that I don't recognize."

They found themselves at a sign at 39.75293 North, 105.01138 West. "What is this newfangled motion machine?" puzzled Angela. What is the number they saw on the bicycle route sign? (1a)
"Let's explore a bit," proposed Ms. Azimuthal. "We can't just look at one point."
"Right, " agreed Ron, "because someday a band called Three Dog Night might sing a song entitled, "One is the loneliest number that you'll ever (1b) "

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How many slides are in a 30 meter radius of this spot? (23b)
Next, the two made their way to the name marked at the point 498568 Easting, 4399832 Northing. "Now we're really lost," they said with despair. What was the name of the country they found at this spot? (22a)

What UTM zone were they in? (22b)
What is the central meridian of this zone? (22c)
What cardinal direction is the central meridian from the spot where they were now standing? (22d)

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Worksheet: Geocaching in Denver
Team Name:
$\qquad$
Start Time:
End Time: $\qquad$
12. $\qquad$
1 b. $\qquad$

2a. $\qquad$
$2 b$. $\qquad$
3. $\qquad$
4. $\qquad$
5. $\qquad$
6.
7. $\qquad$
8a.
8b.
9 a.
9b.
10.
11.

12a. $\qquad$
12b. $\qquad$
13a. $\qquad$
13b. $\qquad$

13c. $\qquad$
14.
15. $\qquad$

16a.
16b.

17a.
17b. $\qquad$
18. $\qquad$
19a.
19b.
20.
21.

22a. $\qquad$
22b.
22c. $\qquad$
22d. $\qquad$
23a. $\qquad$
23b. $\qquad$
24a. $\qquad$
24b.
25.
26.
27. $\qquad$

Answer Key
1a. 6
1b. Do
2a. South Platte River
2b. North Platte, NE
3. 1967
4. 1901
5. $\quad 15^{\text {th }}$ Street
6. Cherry Creek
7. Wood

8a. Chairman of the Platte River Development Committee
8b. 10 meters
9a. $\quad 1.3$ miles
9b. Olinger
10. 7
11. pine and cottonwood

12a. erosion control, maintain flow level
12b. boating and swimming
13a. Cheyenne
13b. Las Cruces NM to Sheridan
WY
13c. Speer
14. To warn boaters of rapids on the right
15. blue fescue

16a. $38^{\text {th }}$ Avenue
16b. Mind Eraser
17a. Carson Brooks
17b. Yes, irrigated
18. $\quad 1.19 \mathrm{~km}$ or .74 mi

19a. Jan 15, 1978 vs Dallas, Jan 25, 1987 vs NY Giants, Jan 31, 1988 vs Washington, Jan 28, 1990 vs San Francisco, Jan 25, 1998 vs Green Bay, Jan 31, 1999 vs Atlanta
19b. Trolley
20. Blue Spruce
21. Blue Barrel of Monkeys - blue plastic underneath the camo tape
22a. France
22b. Zone 13
22c. 105 West
22d. 105 longitude is east of here.
23a. Show Me State.
23b. 5
24a. 1929: Herbert Hoover

24b. King of the Road
25. Rabbit Brush
26. Indian River
27. $\quad 3.5$ km

