

Phoenix College
Physical Science Department

MONTEZUMA WELL, JEROME, TONTO NATURAL BRIDGE FIELD TRIP

I T I N E R A R Y			
START	FINISH	MILES	HOURS
Phoenix College	Montezuma's Well	97.2	2 hrs
<ul style="list-style-type: none"> • Montezuma's Well 			1 hr
Montezuma's Well	Jerome	28.2	1 hr
<ul style="list-style-type: none"> • Gasoline stop (Camp Verde) 			15 min
<ul style="list-style-type: none"> • Audrey Headframe 			30 min
<ul style="list-style-type: none"> • Lunch (Jerome City Park) 			45 min
Jerome	Tonto Natural Bridge	74	2 hr
<ul style="list-style-type: none"> • Tonto Natural Bridge (Fee required) 			1 hr
Tonto Natural Bridge	Phoenix College	104	2 hrs
TOTAL:		304	10 hrs 30 min

T R A V E L D I R E C T I O N S		
FROM	TO	DIRECTIONS
Phoenix College	Montezuma's Well	Head west on Thomas Road
		Merge onto I-17 N and travel north towards Flagstaff
		Take Exit 252 for Sunset Point Rest Area (STOP)
		Continue north on I-17
		Take Exit 293 at Mcquireville
		Take East Beaver Creek to Montezuma's Well (STOP)
Montezuma's Well	Jerome	Return to I-17, travel south,
		Take Exit 287 at Camp Verde,
		Take Hwy 260 north towards Cottonwood,

G E O L O G I C F E A T U R E S

LOCATION	FEATURE	DESCRIPTION
BASIN & RANGE		Tensional tectonic forces ~ 30 million years ago, created normal faults which resulted in mountain ranges separated by wide valleys.
Milepost 231, I-17	New River terraces	Uplift causing rise in base level causing the river to erode downwards forming terraces.
Milepost 236, I-17	Lake deposits	Light fine-grained layers in road cuts
Milepost 243, I-17, looking north as you pass Table Mesa Road exit	Black Canyon City landslide	Occurred ~late 1970's – early 1980's.
Milepost 245, I-17, looking to the right	Black Canyon City landslide, cross-section view	
Along highway north of Black Canyon City as you climb highway incline	Mass wasting prevention techniques	Fences, and metal mesh
Milepost 249, I-17	Lava flows	Several lava flows can be seen, reddish coloring in between two lava flows
East of Sunset Point rest stop	Joe Green's Hill	Vent area for the basalt flows that make-up this mesa ("example" of what a shield volcano looks like)
Milepost 259, I-17	Spheroidal weathering	Weathering of granitic rocks

beneath City of Jerome		(calcium carbonate, CaCO ₃) used in the production of cement used in making concrete.
	Jerome	Copper deposits, island arc environment that collided with North American tectonic plate.
	Audrey Headframe	Mining equipment associated with deep mine shaft.
COLORADO PLATEAU		This part of Arizona was uplifted approximately 3 miles forming the Colorado Plateau. This uplift is what enabled the Colorado River to erode the Grand Canyon.
	Mogollon Rim	Edge of the Colorado Plateau

Ramp Basalts

Highway 17 travels north from the Verde Valley up the edge of the Colorado Plateau. Unlike the edge of the plateau north of Payson (i.e. Mogollon Rim) this is a gentle rise. The rise was created when basalt flows on the Colorado Plateau flowed over the edge creating a ramp of basalt.