

## What's at the end of the road?

Name \_\_\_\_\_

### **Part One- Steps**

Study the map of Arizona Mining Towns. Notice that the mining sites are scattered around Arizona. As mining sites were closed, the miners needed to relocate (move) to make a living. Some of the miners moved to new mining sites, but others were forced to move to the larger cities in Arizona and find new types of work.

1. Your worksheet contains a table that holds 29 locations. There are some empty distances on your table.
2. Measure the distance from these mining sites to major Arizona cities listed at the top of the columns of your worksheet (Column A- E).
3. Enter the distances in the table (Column A-E). You may have to make some reasonable estimates, as not all of the distances will fall evenly on your scale.
4. Then, in the end column (Column F), write the city that would be the closest for the miners to relocate.
5. Now organize your data. Look at the column of closest cities (Column F), take that data and organize it by city. You are grouping your data because you will be creating "migration" or movement zones on your map.
6. Take your groupings and create colored zones on the map (circles, shading, grids) that show where the miners from the different sites might relocate if they needed to.

### **Part Two**

Use your zone map and your data to answer the following questions. (Use the back of your paper if you need more room for your answers.)

1. What city appears to have gained the most miners when mining sites closed? Support your answer with a couple of sentences using the data or your zone map.
  
  
  
  
  
  
  
  
  
  
2. Can you say for sure that miners moved to the "closest" cities to their mining town?
  
  
  
  
  
  
  
  
  
  
3. Are there other reasons or factors that might influence the miners' choice of where to move? What might those things be and why might they be important?

### Arizona Distance Chart

Mining Site	Mineral Mined	Distance in Miles				
		Phoenix	Tucson	Flagstaff	Yuma	Prescott
Ajo	Copper		130	206	104	153
Apache Junction	Gold and Silver	32	92		185	96
Arivaca	Silver	142		250	207	217
Benson	Copper	150	38	235		219
Bisbee	Gold and Copper		79	279	290	263
Bullhead City	Gold and Silver	179	292	166	168	
Chloride	Gold and Silver	177		147	190	115
Clifton	Copper	165	109	200		211
Courtland	Copper		70	258	289	247
Gila City	Gold	146	207		13	168
Gleeson	Copper	181	70	260	288	
Globe	Copper, Gold and Silver	77		134	230	127
Hayden	Copper	84	56	158		145
Jerome	Copper		189	41	203	23
Kingman	Gold and Copper	160	275		178	100
Mammoth	Copper and Gold	100	39	179	232	
McMillianville	Silver	80		125	236	123
Miami	Copper and Silver	70	83	131	223	
Morenci	Copper	162	109	197		208
Oatman	Gold and Silver	167	280		162	114
Oracle	Gold and Silver		30	184	224	166
Pearce	Gold and Silver	173		249	286	239
Quartzite	Gold and Silver	124	218	182	72	
Salome	Gold and Silver	90	192	150		86
Superior	Silver	58	76		208	118
Tombstone	Silver		59	256	275	241
Tubac	Silver	146		249	222	220
Wickenburg	Gold	49	163		140	45
Winkelman	Copper	84	55	159		146

### Name

Closest City

	Ajo
	Apache Junction
	Arivaca
	Benson
	Bisbee
	Bullhead City
	Chloride
	Clifton
	Courtland
	Gila City
	Gleeson
	Globe
	Hayden
	Jerome
	Kingman
	Mammoth
	McMillianville
	Miami
	Morenci
	Oatman
	Oracle
	Pearce
	Quartzite
	Salome
	Superior
	Tombstone
	Tubac
	Wickenburg
	Winkelman

## Answer Key

## What's at the end of the road?

### Part One- Steps

Study the map of Arizona Mining Towns. Notice that the mining sites are scattered around Arizona. As mining sites were closed, the miners needed to relocate (move) to make a living. Some of the miners moved to new mining sites, but others were forced to move to the larger cities in Arizona and find new types of work.

1. Your worksheet contains a table that holds 29 locations. There are some empty distances on your table.
2. Measure the distance from these mining sites to major Arizona cities listed at the top of the columns of your worksheet (Column A- E).
3. Enter the distances in the table (Column A-E). You may have to make some reasonable estimates, as not all of the distances will fall evenly on your scale.
4. Then, in the end column (Column F), write the city that would be the closest for the miners to relocate.
5. Now organize your data. Look at the column of closest cities (Column F), take that data and organize it by city. You are grouping your data because you will be creating "migration" or movement zones on your map.
6. Take your groupings and create colored zones on the map (circles, shading, grids) that show where the miners from the different sites might relocate if they needed to.

The zones may vary slightly because the students may choose to overlap their zones. They may also indicate dual choices of relocation as some towns have a small difference of distance between two cities.

### Part Two

Use your zone map and your data to answer the following questions. (Use the back of your paper if you need more room for your answers.)

1. What city appears to have gained the most miners when mining sites closed? Support your answer with a couple of sentences using the data or your zone map.

**Answers may vary, but Tucson appears to have profited the most, as it is the town that is closest in 14 out of 29 locations.**

2. Can you say for sure that miners moved to the "closest" cities to their mining town? **No**

3. Are there other reasons or factors that might influence the miners' choice of where to move? What might those things be and why might they be important? **Examples of support: The miners might have moved back to their original homes. They may have lived near a railroad, making it easier to relocate to further distances. They may have moved to another mine to work. They may have been close to two cities and picked the larger city, which may have been a bit farther but held more promise for employment. They may have chosen to move farther because the city of their choice may have been better to raise a family. They may have chosen to move out of Arizona altogether.**

## Arizona Distance Chart

Name

KEY: 

Mining Site	Mineral Mined	Distance in Miles
-------------	---------------	-------------------

Closest City
--------------

Phoenix	Tucson	Flagstaff	Yuma	Prescott
---------	--------	-----------	------	----------

Mining Site	Mineral Mined	Phoenix	Tucson	Flagstaff	Yuma	Prescott
Ajo	Copper	100	130	206	104	153
Apache Junction	Gold and Silver	32	92	135	185	96
Arivaca	Silver	142	55	250	207	217
Benson	Copper	150	38	235	265	219
Bisbee	Gold and Copper	200	79	279	290	263
Bullhead City	Gold and Silver	179	292	166	168	150
Chloride	Gold and Silver	177	290	147	190	115
Clifton	Copper	165	109	200	320	211
Courtland	Copper	185	70	258	289	247
Gila City	Gold	146	207	250	13	168
Gleeson	Copper	181	70	260	288	240
Globe	Copper, Gold and Silver	77	90	134	230	127
Hayden	Copper	84	56	158	220	145
Jerome	Copper	85	189	41	203	23
Kingman	Gold and Copper	160	275	135	178	100
Mammoth	Copper and Gold	100	39	179	232	155
McMillianville	Silver	80	100	125	236	123
Miami	Copper and Silver	70	83	131	223	110
Morenci	Copper	162	109	197	320	208
Oatman	Gold and Silver	167	280	155	162	114
Oracle	Gold and Silver	100	30	184	224	166
Pearce	Gold and Silver	173	80	249	286	239
Quartzite	Gold and Silver	124	218	182	72	130
Salome	Gold and Silver	90	192	150	100	86
Superior	Silver	58	76	140	208	118
Tombstone	Silver	170	59	256	275	241
Tubac	Silver	146	45	249	222	220
Wickenburg	Gold	49	163	115	140	45
Winkelman	Copper	84	55	159	235	146

Phoenix	Ajo
Phoenix	Apache Junction
Tucson	Arivaca
Tucson	Benson
Tucson	Bisbee
Prescott	Bullhead City
Prescott	Chloride
Tucson	Clifton
Tucson	Courtland
Yuma	Gila City
Tucson	Gleeson
Phoenix	Globe
Tucson	Hayden
Prescott	Jerome
Prescott	Kingman
Tucson	Mammoth
Phoenix	McMillianville
Phoenix	Miami
Tucson	Morenci
Prescott	Oatman
Tucson	Oracle
Tucson	Pearce
Yuma	Quartzite
Prescott	Salome
Phoenix	Superior
Tucson	Tombstone
Tucson	Tubac
Prescott	Wickenburg
Tucson	Winkelman

All distances are approximate.