Understanding by Design Unit Template Guide

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| Title of Unit | Colorado Regions | | Grade Level | Intermediate |
| Curriculum Area | Colorado Geography | | Time Frame |  |
| Developed By |  | |  | |
| Identify Desired Results (Stage 1) | | | | |
| Content Standards | | | | |
| History   * Standard: 1.1 History – Organize and sequence events to understand the concepts of chronology and cause and effect in the history of Colorado. * Standard:1.2 History – The historical eras, individuals, groups, ideas and themes in Colorado history and their relationships to key events in the United States.   Geography   * Standard: 2.1 Geography - Use several types of geographic tools to answer questions about the geography of Colorado. * Standard: 2.2 Geography - Connections within and across human and physical systems are developed.   Economics   * Standard: 3.1 Economics – People respond to positive and negative incentives.   Math   * Standard: 3.1 Visual displays are used to represent data   Reading, Writing, and Communication   * Standard: 2.2 Comprehension and fluency matter when reading informational and persuasive texts in a fluent way. | | | | |
| Understandings | | | Essential Questions | |
| * Individuals recognize important events and can put them in chronological in order to understand cause and effect such as migration west, discovery of gold and the Gold Rush, the growth of cities and towns. * The context and information from the past is used to make connections and inform current decisions. For example, Colorado has had a history of boom and bust cycles that should influence the decisions of city and state planners. * Technological developments continue to evolve and affect the present. * Individuals and businesses learn how to use geographic tools to answer questions about their state and region to make informed choices. For example, a family reads a weather map and researches road conditions to inform their decision to go to the mountains in the winter. * Individuals and businesses use geographic tools to collect and analyze data regarding the area where they live. * Individuals and businesses consider geographic factors in making settlement decisions. * Individuals and businesses adapt to and modify the environment. For example, businesses and resorts have been created near hot springs throughout the state. * Positive incentives influence behavior predictably over time. For example, responsible individuals save for the future and move for better job opportunities. * Negative incentives influence behavior predictably over time. For example, people move or refuse to relocate due to poor climate or resource shortages. * The collection and analysis of data provides understanding of how things work. * Online comprehension strategies differ from those used to comprehend printed text due to non-linear design and the addition of multimedia clues which can greatly distract or aid in understanding. | | | * How have past events influenced present day Colorado and the Rocky Mountain region? * What social and economic decisions caused people to locate in various regions of Colorado? * In what ways have geographic, economic, cultural, and technological changes influenced Colorado today? * Why did people of various cultures migrate to and settle in Colorado? * How have various individuals, groups, and ideas affected the development of Colorado? * Which geographic tools are best to locate information about a place? * Why did settlements and large cities develop where they did in Colorado? * How are the regions of Colorado defined by geography? * How does the physical location of Colorado affect its relationship with other regions of the United States and the world? * What physical characteristics led various cultural groups to select the places they did for settlement in Colorado? * How did Colorado settlers alter their environment to facilitate communication and transportation? * How does the physical environment affect human activity? * How does human activity affect the environment? * Why are different goods and services important at different times in Colorado’s history? * How have science and technology changed the economy of Colorado? * How have natural, human, and capital resources had both positive and negative impacts on the development of Colorado? * What can you learn by collecting data? * What can the shape of data in a display tell you? * What does informational text tell readers about themselves, others, and the world? * How do text features help readers gain information that they need? | |
| Knowledge  Students will know…… | | | Skills  Students will be able to…… | |
| According to  <http://dictionary.kids.net.au/word/county>  A county is:   * A region created by territorial division for the purpose of local government; "the county has a population of 12,345 people" * The largest administrative district within a state; "the county plans to build a new road" * A region is:the extended spatial location of something; "the farming regions of France"; "regions in all parts of the world"; "regions of outer space"   The major life zones   * Prairie or grassland * Semi-desert shrublands * Foothills or woodlands * Montane * Subalpine * Alpine * Riparian   Major landforms of Colorado   * Great Plains * Rocky Mountains * Colorado Plateau   Major Rivers   * Colorado * Rio Grande * South Platte * Arkansas River   Major Mountain Ranges   * Colorado Rocky Mountains * Front Range * Sangre de Cristo Mountains * Sawatch Range * San Juan Mountains | | | * Answer questions about Colorado regions using maps and other geographic tools (DOK 1-2) * Use geographic grids to locate places on maps and images to answer questions (DOK 1-2) * Create and investigate geographic questions about Colorado in relation to other places (DOK 1-3) * Illustrate, using geographic tools, how places in Colorado have changed and developed over time due to human activity (DOK 1-4) * Describe similarities and differences between the physical geography of Colorado and its neighboring states (DOK 1-2) * Describe how the physical environment provides opportunities for and places constraints on human activities (DOK 1-2) * Explain how physical environments influenced and limited immigration into the state (DOK 1-2) * Analyze how people use geographic factors in creating settlements and have adapted to and modified the local physical environment (DOK 1-3) * Describe how places in Colorado are connected by movement of goods and services and technology (DOK 1-2) | |
| Assessment Evidence (Stage 2) | | | | |
| Performance Tasks: T | | | Other Evidence: OE | |
| MapCo Regions Activity R1  MapCo Regions Activity R2  MapCo Regions Activity R3  MapCo Regions Activity R4  Design A Brochure  Write A Persuasive Essay  Write A Script  Produce A Commercial  Where Am I?  Jeopardy  Region Venn Diagram  Colorado Map Making  Colorado Geopoly | | |  | |
| Activities | | | | |
| Lesson 1: | | MapCo Regions Activity R1 | | |
| Lesson 2: | | MapCo Regions Activity R2 | | |
| Lesson 3: | | MapCo Regions Activity R3 | | |
| Lesson 4: | | MapCo Regions Activity R4 | | |
| Lesson 5: Design a Brochure | | Students design a brochure using one of the major regions of Colorado. | | |
| Lesson 6: Write a Persuasive Essay | | Students pick one of the Colorado regions. They will write a persuasive essay convincing someone why they would want to live in this region. | | |
| Lesson 7: Write a Script | | Students will demonstrate their knowledge of Colorado regions and boundaries by pretending to be a tour guide and writing a script of what he/she would tell tourists. | | |
| Lesson 8: Produce a Commercial | | Students will produce a commercial demonstrating their knowledge of Colorado regions and boundaries. | | |
| Lesson 9: Where Am I? | | Students locate and provide information their hometown on the Map of Colorado provided. | | |
| Lesson 10: Jeopardy | | Students are able to demonstrate their knowledge of Colorado regions by playing Jeopardy as a class. | | |
| Lesson 11: Venn Diagram | | Compare and contrast two regions using the Venn Diagram. | | |
| Lesson 12: Colorado Map Making | | Students create their own map of Colorado following the directions and template provided. | | |
| Lesson 10: Colorado Geopoly | | Students demonstrate their knowledge of Colorado regions and boundaries by playing Colorado Geopoly. | | |

From: Wiggins, Grant and J. McTighe. (1998). *Understanding by Design,* Association for Supervision and Curriculum Development

**Worksheet R1. Activity Regions 1 Key**

[**Activity R1: Western Colorado**](http://unco.maps.arcgis.com/apps/webappviewer/index.html?id=2294e74ff7ca4dcdbc1fd5484d469287)

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| **Step 1** | **Your Task** |
| The **Regions** (**CEH)** and **1920 County Boundaries** layers are visible. Click the Legend button to see the legend for the 1900-1910 Pop. Change layer. You can also see the legend/symbols for individual layers by using the Layer List  button and then clicking the side arrow next to a layer’s name. Feel free to move the Legend or Layer List box(es) to the side so you can see both the legend and most of the map.  According to  <http://dictionary.kids.net.au/word/county>  A county is:  a region created by territorial division for the purpose of local government; "the county has a population of 12,345 people"  the largest administrative district within a state; "the county plans to build a new road"  A region is:  the extended spatial location of something; "the farming regions of France"; "regions in all parts of the world"; "regions of outer space" | *Identify* at least ten counties that are entirely within the region of Western Colorado (*click* on each individual county).  Possible Answers:  1. Archuleta  2. Chaffee  3. Delta  4. Eagle  5. Garfield  6. Grand  7. Jackson  8. Gunnison  9. Hinsdale,  10. La Plata  11. Lake, Mesa  12. Moffat  13. Montezuma  14. Montrose  15. Ouray  16. Pitkin  17. Rio Blanco  18. Routt,  19. San Juan  20. San Miguel  21. Summit  22. Mineral County is right on the boundary.  Define Regions in your own words:  Regions maintain no government. Also, a region is a geographic area with very loosely defined boundaries  Define Counties in your own words:  Counties (e.g., Grand County, CO) are entities that reside within a state.  About nine counties are divided between “Western Colorado” and other regions. *Identify* any four of these. Why do you think the regional boundary goes through these counties?  Possible Answers:   1. Boulder Clear Creek 2. Conejos 3. Fremont 4. Gilpin 5. Larimer 6. Park 7. Rio Grande 8. Saguache     These counties have quite a bit of variety. Larimer County, for example, includes the Front Range cities of Ft. Collins and Loveland. The northwestern part of the county, however, is near Cameron Pass in the high mountains. Towns are very small in this part of Larimer County that wouldn’t have a Starbucks Coffee or a 10-theatre movie complex! Saguache County is split between the Southern Colorado and the Western Colorado Regions. The Southern Colorado portion of Saguache County is in the San Luis Valley, an area of strong Hispanic influence and an economy more clearly based on agriculture. The northwestern portion of Saguache County includes 12,000 foot peaks. Similar comparisons could be made with the other counties. |
| **Step 2** | **Your Task** |
| *Check ON* the **Major Mountain Ranges** layer  *Check OFF* the **Major Mountain Ranges** and *Check ON the* **Life Zones** layer. Look at the legend or Life Zones.  Plains and Desert Southwest: **3,300 to 5,000ft** above sea level.  Foothills Life Zone: **5,000 to 7,500 ft**. above sea level.  Montane Life Zone: **7,500 to 10,500 ft.** above sea level.  Subalpine Life Zone: **10,500 to 11,500 ft.** above sea level.  Alpine Life Zone: **11,500 ft** above sea level. | Which region has the most mountains?  Western Colorado. Point out that this map is a generalization of mountains in Colorado. Not all mountain ranges have been included.  Which two high elevation life zones are found more in Western Colorado than in any other region?   1. Alpine 2. Subalpine   These life zones are rare in other regions. (Have students toggle back and forth with the legend.) Exceptions: the Alpine and Subalpine in the southern Front Range is the Pike’s Peak area, and the line of mountains in Southern Colorado is the Sangre De Cristos (which continue into New Mexico).  The boundaries of “Regions” are never perfect; there are always small areas that don’t seem to fit. Regions are always generalizations of the real world! |
| **Step 3** | **Your Task** |
| *Check ON* the **Major Rivers** layer. *Identify* the Yampa, White and Colorado Rivers (in the western ½ of the state). *Note: you may want to zoom into northwestern Colorado; and you need to precisely click on rivers to get the correct pop-up box*. | Which general direction do the rivers flow? How do you know?  To the west.  The Life Zones also represent different elevation zones. Since the rivers are coming out of the Montane and Subalpine zones and going into the Foothills and Plains zones; AND since water flows downhill, the rivers must be flowing generally toward the west.  Write a sentence describing how the characteristics of the region called Western Colorado is different from the other regions of Colorado.  Students could have a number of ideas. Examples: Western Colorado has more mountains than other regions. Most of Colorado’s Alpine and Subalpine areas are in Western Colorado. Western Colorado is the “biggest” region. Most of the Western Colorado’s rivers flow west (toward the Pacific Ocean). The Mountains don’t seem to have very many farms. |
| **Step 4** | **Your Task** |
| Go to **Doing History** and investigate the following site:  <http://hewit.unco.edu/dohist/trappers/themes.htm> | What did the first European-Americans who came to Western Colorado do?  Trappers and Traders  What do you think was the next economic activity that was important in Western Colorado?  Before going on to question “c” have students guess at what activity might have been important early in the Colorado’s history.  Most likely guesses will be mining and farming/ranching. |
| **Step 5** | **Your Task** |
| *Make visible* the **Mineral Belt** layer and *Refresh Map.*  More detailed Information can be found at:  <http://coloradogeologicalsurvey.org/mineral-resources/historic-mining-districts/> | How does the location of this feature relate to the boundaries of the Colorado regions?  Almost all of the Mineral Belt is in Western Colorado in the mountains. Colorado’s “Mineral Belt” represents a southwest-to-northeast-trending zone of rock types rich in mineral ores. Much, but not all, of the State’s mineral wealth (such as gold, silver, lead, molybdenum) is found in this zone. A notable mining area outside of the mineral belt is the Cripple Creek area.  What other economic activity might have been important in Western Colorado? Explain your thinking.  If students guessed mining and farming in “b” and mining has already been discussed, the logical answer is farming and ranching. However, students might also guess tourism. Remind students that in the late 1800s tourism was not yet important to the economy of Western Colorado. Early tourism examples, such as the opening of the Glenwood Hotel in Glenwood Springs (1884) or the Estes Park Hotel (1877), were the exception rather than the norm. |
| **Step 6** | **Your Task** |
| *Check ON* the **1920 # of Farms** layer. This is a proportional symbol layer of farms in each county in 1920. | *Identify* the seven counties in Western Colorado that have the most farms. Arrange the seven counties in numerical order from greatest to least.   1. Mesa (the most with 2207) 2. Delta 3. Garfield 4. Moffat 5. Montrose 6. Routt 7. La Plata.   Have students click in the middle of each blue symbol to get the pop-up box with # of farms.  Which county in Western Colorado has the most farms of all?  Mesa |
| **Step 7** | **Your Task** |
| Click on the layers an over-lay of Rivers, Life Zones, and 1920 Farms in order to see how they relate. | Describe how the location of farming in Western Colorado relates to the location of the Rivers and the Life Zones.  Students should spot that the counties with the most farms have major rivers and a larger area of Plains or Foothills life zones. Lead them to recognize that water was needed for irrigation, and that lower elevations have warmer temperatures. The high mountain counties are just too cold for agriculture. |
| **Step 8** | **Your Task** |
| Add the mineral belt layer then compare the location of farms in Western Colorado to the Mineral Belt.  Compare the location of farms in Western Colorado to the Mineral Belt. | Why do you think the counties in the Mineral Belt have fewer farms?  In which two Life Zones does Western Colorado appear to have the most farms?  Farming Life Zones:  1.Plains  2.Foothills;  In which three Life Zones is the Mineral Belt centered?  Mineral Belt:  1.Alpine  2.Subalpine  3.Montane. |
| **Step 9** | **Your Task** |
| Most geographers think Western Colorado could be divided in two regions, because of the difference between economies based on farming and economies based on mineral resources.    Now *Check OFF* all the open layers AND THEN *Check ON* the **Present Regions?** Layer*.* This shows one possible way to define that boundary. | If you were to divide Western Colorado into two regions, Use the map to draw or color in where you think that boundary should go:  How does the boundary you drew compare to the boundary on the Present Regions layer?  Accept reasonable guesses to these questions. These questions lead into the next activity. Hopefully, students see that the high mountain part of Colorado should be separated from the more agriculturally oriented far western portion of the state. |

**Worksheet R1. Activity Regions R2 Key**

*Open* [**Activity R2: Southern Colorado**](http://unco.maps.arcgis.com/apps/webappviewer/index.html?id=d9b1da4dfae7463090c7d966e56267af)

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| **Step 1** | **Your Task** |
| **How the early history of “Southern Colorado” differs from the rest of the state.**  The **Territories 1860** and **Western Rivers** layers are visible.  *Check ON* the **Early Forts and Towns** and **Trails** layers; make **Trails.** *Zoom in* on the area surrounding the Rio Grande in northern New Mexico and Kansas Territories.  For Bent’s Fort history see: <http://www.nps.gov/beol/>  An interesting timeline and history of the trail can be found at:  <http://www.nps.gov/safe/learn/historyculture/map-timeline-intro.htm>  *Check ON* the **Major Mountain Ranges** layer*.* Select the Bookmark  “Centered on Colorado”.  *Check ON* the **Regions (CEH)** layer. | *Identify* the five rivers that flow through the New Mexico Territory and locate the Rio Grande.  It’s the river that flows south and then makes up part of the Texas-Mexico border.  What are two important early forts and towns on the trail in the northern New Mexico Territory?  1. Santa Fe.  2. Bent’s Fort.  *Identify* the name of the main trail connecting these two towns.  Santa Fe Trail Extension.  Why do you think the boundary of the New Mexico Territory made a big curve around the Rio Grande?  The Spanish wanted to maintain the rights to the water, so the boundary was drawn to include the Rio Grande River and all its tributaries. Also, rivers were a common “highway” used by explorers, so Spanish explorers would have followed the river up from present day Texas to its headwaters in present day Colorado.  *Identify* the mountain range through which this old boundary went (boundary between Utah and New Mexico territories).  The San Juan Mountains  How does this region compare to the location of the original boundary of the New Mexico Territory? How are they similar and different?  Remind students that the red dashed line represents the territory boundaries. Not perfect, but the boundaries are somewhat similar. The San Juan Mountains act as a border on both (albeit in different locations), and there is an east-west trending boundary on both, although the territory boundary was a bit south of the regions boundary. |
| **Step 2** | **Your Task** |
| **Southern Colorado as a distinct region.**  *Check OFF* all layers except **Regions (CEH)**. *Check ON* the **1870 County Boundaries** layer*.* You should now be focused on the territory that became the State of Colorado in 1876.  Zoom into Colorado. Click the table expansion button  (bottom/middle)*, You should see the table come up.* Make sure the 1870 County Boundary tab is highlighted so that you are looking at that table (not the Regions). The last field (far right) shows the number of people in each Colorado county who were born in the New Mexico Territory, as of the time of the U.S. Census of 1870. Click on this field heading (born in New Mexico) to sort the counties high-to-low.  In the table click on the 5 counties with the largest **# Born in New Mexico Ter.** (note that each time you click on the county name in the table that a different county will be highlighted on the map). The name of the county is the *Name* field and the *# Born in New Mexico Ter.* field tells you the number of people in that county that were born in the New Mexico territory.  Compare the populations born in New Mexico to the location of the old New Mexico Territory. | As of 1870, what were the names of the eight counties that were all or partly within the region of Southern Colorado?   1. Bent 2. Conejos 3. Costilla 4. Fremont 5. Huerfano, 6. Las Animas 7. Pueblo 8. Saguache (note that many have Spanish names).   How did the region of Southern Colorado differ from the rest of the state at this time?  It is difficult to find dependable ethnic data for that period. However the **# Born in New Mexico Territory** field probably represents mostly people of Hispanic descent (the original Spanish settlers of northern New Mexico). Thus, much (if not most) of the territory’s Hispanic population resided in the southern part of what is now Colorado.  Fill out the table.   |  |  | | --- | --- | | County: | NM Born Population | | Conejos | 1473 | | Costilla | 1137 | | Huerfano | 1442 | | Las An. | 3339 | | Pueblo | 569 |   What can you conclude about the relationship of the population of this group to this boundary?  Most of the counties are in the New Mexico territory (or, at least, partially).  How did the population of the Southern Colorado region differ from the rest of the new state of Colorado?  There were more people of Hispanic descent in Southern Colorado. |
| **Step 3** | **Your Task** |
| **The changing boundaries of the Southern Colorado region since the 1870s.**  *Check OFF* all layers. *Check ON* the **Present Regions?** layer*.* Then *Check ON and OFF* the **Regions (CEH)** layer several times, comparing the two maps.  *Check ON* the **1920 # of Farms** layer*.*  Although both the San Luis Valley Area and the Eastern Plains depend heavily on agriculture for their economy, there is an important difference. *Check ON* the **Life Zones** layer to see this difference.  More information on the history of the San Luis Valley can be found at:  <http://www.museumtrail.com\>  The actual “San Luis Valley” is the area on the west side of the region – a high mountain valley surrounded by mountains (known as a “park” elsewhere in Colorado, like South Park or North Park).    Go to **Links—Atlas of Colorado,** and look at Population Map 23.  Find the map at: <http://www.unco.edu/hss/geography-gis/pdf/atlas/atlas-population.pdf> (entitled Hispanic or Latino Population 2000). | How has the region of Southern Colorado been changed, according to this new (Present) map of regions?  Most of Southern Colorado has been split or put into two other regions: San Luis Valley and the Eastern Plains. Smaller portions of the old Southern Colorado Region are also now part of the Mountains and Front Range regions.  Does this help explain the division of Southern Colorado into its “present regions”?  Yes, the portions of the old Southern Colorado region that have a lot of farms are now part of the Eastern Plains region. Students can conclude that agriculture is more important to the areas that are in the Eastern Plains. There is some truth to this, although agriculture remains important in the San Luis Valley.  What does the addition of this layer tell you about how the San Luis Valley differs from the Eastern Plains? How do you think this might affect farming?  Most of the San Luis Valley Area is in the Foothills or higher life zones. Most of the region is above 7,000 feet elevation. Thus, not all crops can be grown at these higher elevations. Primary crops that can be grown include potatoes, peas, lettuce, alfalfa, and cabbage.  Does the population of Southern Colorado still make it a distinct region in the state?  Yes, one could argue that both the old Southern Colorado Region and the present San Luis Valley and Area Region would be accurate. |

**Worksheet R3. Activity Regions R3 Key**

*Open* [**Activity R3: Denver and the Front Range**](http://unco.maps.arcgis.com/apps/webappviewer/index.html?id=4a05c80c8e224fcab56f909f7830077f)

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| **Step 1** | **Your Task** |
| **Denver’s importance in the early days of the State of Colorado.**  The **1873 Railroads** and **Denver (star)** layers are *Visible*, shown with the **1870 County Boundaries** as they existed in 1870. If needed zoom out to see the general directions of the railroads.  *Check ON* the **1870 Community Population** layer. Go to Bookmarks  and select the *Denver Metro. Area* bookmark. *Identify* some of the communities that the early (1873) railroads connected (especially west of Denver). | *Identify* the two main railroad lines that came into Denver – one that went north-south through Denver and the other that entered Denver from the east.  1. Denver Pacific  2. Kansas Pacific  (the Rio Grande railroad came north from Pueblo to Colorado Springs)  What reason do you think explains why the railroads went where they did at that time?  The railroads went to the most heavily populated areas (Denver). Students might also mention that the railroads went to the “supply towns” like Denver and Pueblo that supplied miners. Some of the lines also make it up into the mining towns. See the Colorado’s Mining Region activities.  What did the communities to the west of Denver have in common?  They were all mining communities. |
| **Step 2** | **Your Task** |
| Locate each of the following communities. Click on the towns to get their pop-up boxes. Depending on your zoom level you might need to zoom out a bit or pan the map over a bit to the west  *Check ON* the **Regions (CEH)** layer. *Zoom out* to see most of the state.  *Print* a copy of the map as it now appears for use later. | Complete the table below.   |  |  |  | | --- | --- | --- | | **Town** | **Pop 1870** | **Pop 1880** | | Denver | 4759 | 35629 | | Golden | 587 | 2730 | | Georgetown | 802 | 3294 | | Breckenridge | 51 | 1657 | | Central City | 2360 | 2628 | | Boulder | 343 | 3660 | | Blackhawk | 1068 | 1540 | | Idaho Springs | 229 | 733 |   How much larger was Denver than the other Colorado towns in 1870?  It varies, but somewhere between 2,399 and 4,708. The main thing is for students to see that it was significantly larger than any other settlement (more than twice the size of Central City, the next largest).  By 1880 did the difference between Denver and the other towns grow?  Yes, by a large amount. Now, Denver is between 31,969 and 34,896 larger than the other towns – showing that the difference got even larger during this decade.  Why is Denver a separate region of its own?  Denver is much larger than any of the other towns (in terms of population). By the 1880s Denver came to dominate Colorado, economically and politically. From the mid-1880s to the mid-1890s Leadville briefly challenged Denver’s dominance. (That challenge ended with the Silver Panic of 1893.) |
| **Step 3** | **Your Task** |
| **Are “Denver” and the “Front Range” still two distinct regions?**  *Click OFF* the **1873 Railroads, 1870 Community Population,** and **1870 County Boundaries** layers. *Check ON* the **2001County Boundaries** and the **Present Regions?** layers*.* You should now see the current counties, with Denver still shown with the star as well as two versions of the “regions” of Colorado.  *Check ON* the **2000 Community Population** layer*.*  *Zoom in* on the “Present Region” called Front Range. As you zoom in the circles will redraw and should start to separate out. Locate several cities, besides Denver, that have the larger-sized circles for symbols. Make sure you click dead-center on a city’s symbol to get the pop-up box for that city. In the pop-up box look for “POP\_2000” to find the populations. (Your teacher may give you specific cities to look up.)  *Zoom out*, then c*lick off* the **Regions (CEH)** layer and the **2000 Community Population** layer. *Check ON* the **Interstates** layer. | Is Denver still shown as a separate region from the “Front Range”? Why do you think this has changed?  No. Try to guide students back to their answer to 1d (about population size). Now, Denver isn’t so much bigger than surrounding cities. Thus, Denver by itself doesn’t dominate Colorado to the degree it did in 1870.  How is this map different than the map of 1870 Communities you printed?  WOOOO! There are a lot more cities overall in Colorado. In the Front Range there are quite a few large cities — so many, in fact, that it is impossible to separate out the different cities. Denver doesn’t seem to be as dominant. These circles ARE proportional and proportional to the blue 1870 ones!!  What can you conclude about the region of the Front Range as it is defined for 2000?  Students could look at cities like Arvada, Highlands Ranch, Aurora, Thornton, Lakewood, and others. Help students realize the Front Range region today is a highly urbanized region that is interconnected and a region in which it is often difficult to know when exactly you are leaving one city and entering another.  Why do you think Denver is no longer considered a separate region?  Why do you think modern transportation has changed how Denver and the Front Range cities are connected? |

**Worksheet R4. Activity Regions R4 Key**

Some useful web sites:

<http://www.history.com/topics/dust-bowl>

<http://www.pbs.org/wgbh/americanexperience/films/dustbowl/> (Great PBS film and links)

<https://en.wikipedia.org/wiki/Dust_Bowl>

<https://www.ncdc.noaa.gov/paleo/drought/drght_history.html>

*Open* [**Activity R4: Eastern Colorado**](http://unco.maps.arcgis.com/apps/webappviewer/index.html?id=5eea1ea3975944f09a40c6b59724ea3c)

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| **Step 1** | **Your Task** |
| **Eastern Colorado: A Unique Region**  The **Regions (CEH)** layer with the **1920 County Boundaries**.  Look at all of the counties that are located entirely or partly within the region called Eastern Colorado.  *Check ON* the **Life Zones** layer. *Look at its legend.*  Go to **Links – Atlas of Colorado** and examine Physical Map 9 to see the natural vegetation of this region.  The map shows that nearly the entire Eastern Plains are dominated by grassland. | What do they all have in common, in terms of their shape?  Many counties have a square, rectangular, or other clearly geometric shape.  What do you think the region of Eastern Colorado looks like? What kind of landforms and vegetation does it have?  Eastern Colorado is part of the Great Plains, a relatively flat to undulating grassland environment. See the Colorado’s Physical Geography activities.  How do the physical characteristics of Eastern Colorado (landforms and vegetation) help explain the pattern of county boundaries in the region?  County boundaries weren’t constrained by physical geography, given the relatively flat terrain. The short-grass vegetation also did not hamper surveying efforts. So, it was easy to draw straight lines as boundaries across the Plains. |
| **Step 2** | **Your Task** |
| **Economy of Eastern Colorado**  *Check OFF* the **Life Zones** layer.  *Check ON* the **1920 # of Farms** layer  *Check ON* the **1940 # of Farms** layer*.* | How have people earned a living in Eastern Colorado? How did Eastern Colorado compare to the other regions in the state in terms of the number of farms at that time?  Eastern Colorado (under the Regions CEH) has large numbers of farms. However, the edges of the regions next to the Front Range and Southern Colorado also appear to have quite a few farms.  How did the number of farms change in Eastern Colorado between 1920 and 1940?  A dramatic DECREASE in the number of farms  Why do you think that change occurred?  This is a thought question that the maps in this exercise do not answer. Essentially the Dust Bowl and Depression of the 1930s resulted in thousands of farmers going broke and losing their farms. In this marginal Great Plains environment farms needed to be much larger for farm families to survive. This was especially the case for dry land farmers (those without irrigation access). Farmers that had dependable access to irrigation water were much more likely to survive the drought and economic hardships of the 1930s. The net result was that small farms and their owners just couldn’t make a living. See the Population Change After 1900 activities. |
| **Step 3** | **Your Task** |
| **Changes to the Region**  *Check OFF* the **1920 # of Farms** and the **1940 # of Farms** layers. *Check ON* the **Present Regions?** layer*.* You should now see only the county boundaries and the two ways to name the regions of Colorado.  *Check ON* the **Life Zones** layer. | Describe how the “Eastern Plains” region on the **Present Regions?** layer differs from the Eastern Colorado region you’ve looked at before.  The “new” Eastern Colorado really includes all of Eastern Colorado. Southern Colorado is now much smaller, and is essentially now the San Luis Valley Area.  Explain why geographers changed the way they define the eastern region of the state?  The newer Eastern Plains (Present Regions) is very similar to the Plains life zone. This method also better represents the agricultural dominance in the region.  Does adding this information help you understand the differences you described above? |