

IR-15: Texas Cities

1. Use a Texas highway map as a reference to locate and mark the following cities on the outline map below:

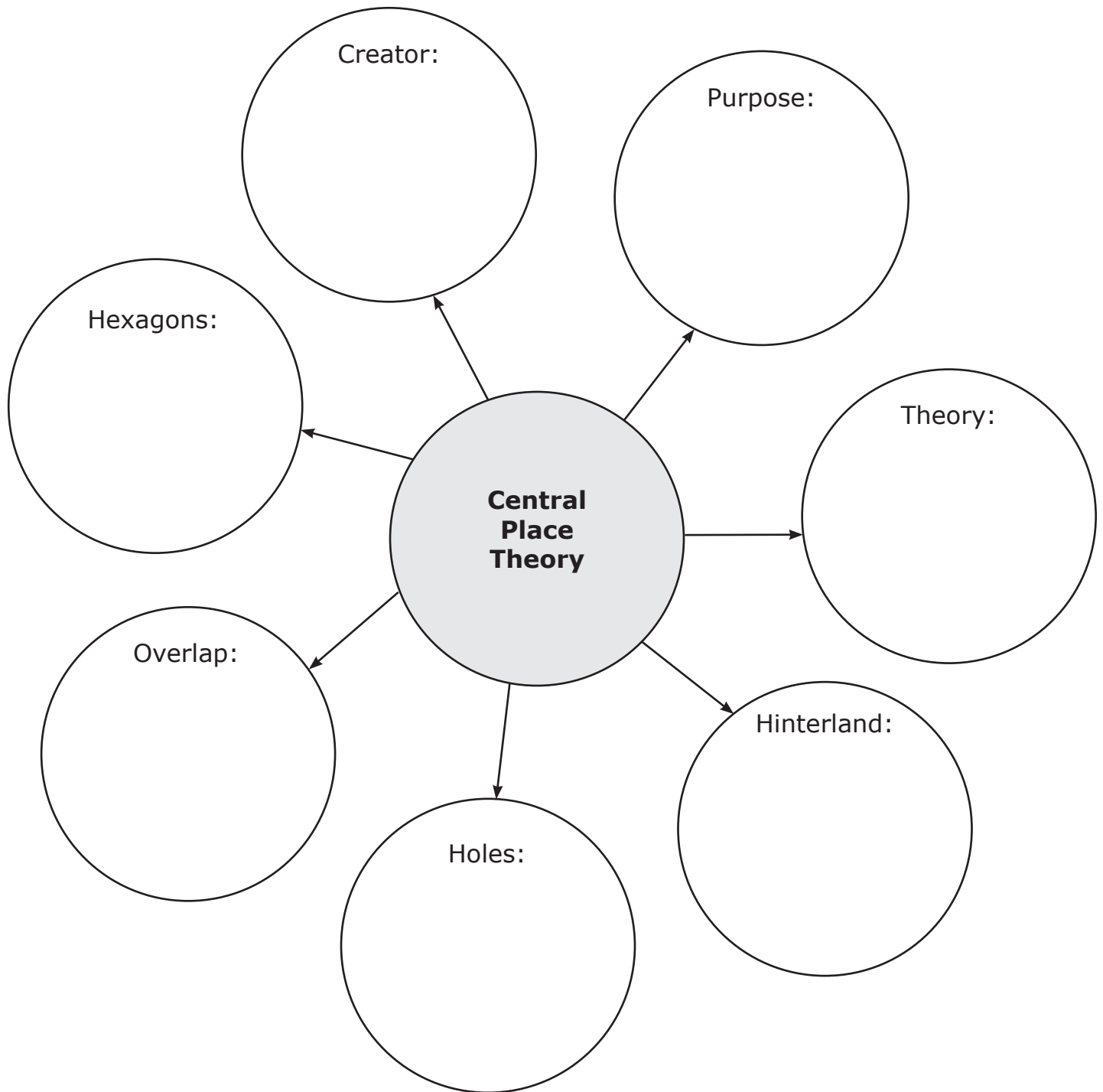
- | | | |
|---------------|---------------|----------------|
| a. Anahuac | g. Sanger | m. Addison |
| b. Baytown | h. Denton | n. San Antonio |
| c. Pasadena | i. Lewisville | o. Kerrville |
| d. Houston | j. Dallas | p. Junction |
| e. Katy | k. Prosper | |
| f. Brookshire | l. Frisco | |

2. What patterns can you identify as you study the places you located on the map?



IR-16: Central Place Theory—Reading to Learn

Complete this graphic organizer as you read IR-17.



Central Place Theory

Walter Christaller, a German geographer of the 20th century, was thinking about how farmers got their products to the marketplace when he created the **central place theory**. Christaller's initial ideas led to a deeper explanation of the economic and spatial relationships between cities. According to Christaller, each central place, or city, exists to serve a specific function or purpose.

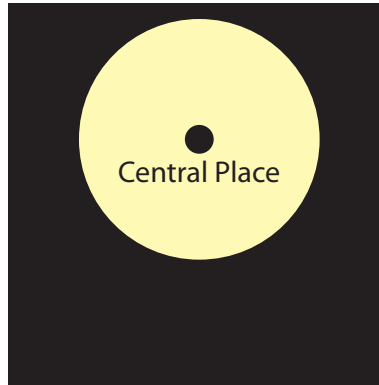


Figure 4.1. Central place and hinterland

Consider the above diagram, with the central place, or city, represented by the dot and the **hinterland**, or surrounding land, represented by the shaded area. According to Christaller, the city, or marketplace, would be in the center of the community, with the farmland radiating out from the center and existing in the hinterland. The city would act as central location or meeting place for farmers to exchange products with other farmers. Farmers could also purchase things such as farm tools, seedlings, and fertilizer.

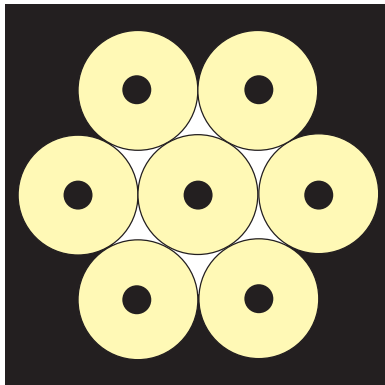


Figure 4.2. Service or market areas

In this theory or model, if circles are used to represent service or market areas, then spaces can be discovered when several central places are put side by side, as in the diagram to the left. Ideally, there would be no spaces between cities because all areas need to have access to services. In reality, there are services provided to everyone, no matter how remote the area may be. Given the right equipment, residents can access satellite television or radio signals in the most physically remote areas of the world. If, however, the spaces in the service areas did exist, there would be problems. Think about the impact on people if sanitation trucks did not pick up trash, electricity were not provided, or fire trucks could

not be dispatched in times of need.

We also know that some cities exist to serve other cities. In other words, there is a hierarchy of cities. A large major city has a central business district where most, if not all, of the products are made or decisions by companies are made. Most of the workers in those companies live outside of the central business district in smaller

IR-17: Central Place Theory

cities called suburbs. Even farther away from the central business district are rural farming communities where grains are grown or livestock are raised. It is important to note, though, that all of these places where people live have a sense of purpose and interact with each other.

One farming community may give way to an adjacent farming community. Because of the distance, the second farming community may be closer to another central business district than the original one. Therefore, we begin to see how various farming communities and the suburbs they serve may be associated with different central places. When city services overlap each other, however, as in the diagram to the right, then there is duplication of services. This duplication might create confusion for schools, police patrols, service areas for public libraries, and many other services. If there were a car accident, which police department would be dispatched to the scene of the accident? To which regional hospital might the injured people in the car accident be taken?

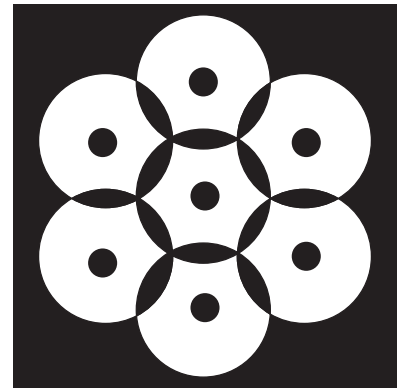


Figure 4.3. Duplication of services

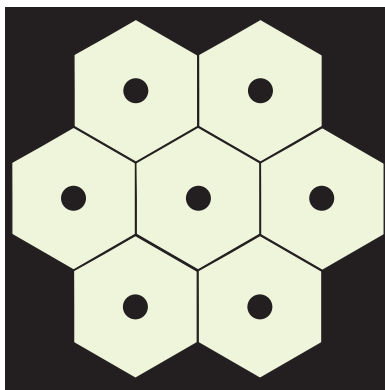


Figure 4.4. Adjacent cities

To prevent confusion associated with regions that do not receive services or that receive duplicated services, Christaller used hexagons instead of circles in his model. The diagram to the left illustrates how one market area would meet another area in locations where central place cities are large enough to service all communities equally. There are no gaps in services or overlapping areas of duplicated services. In this diagram, you will notice seven market areas served by seven central places or cities. There is an equal amount of land within each service area, with every resident relatively close to a central place. However, there is one central place in the middle, surrounded by the other six. This illustrates the concept of the hierarchy of cities: Small farming communities are related to slightly bigger towns; towns are related to suburbs; and suburbs are related to large metropolitan central places.

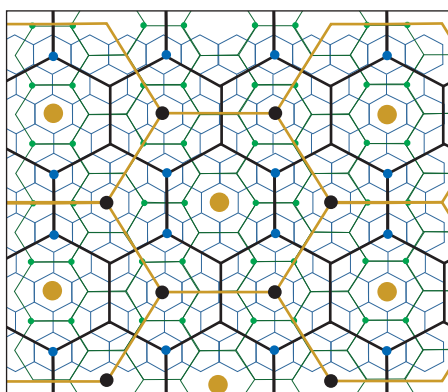


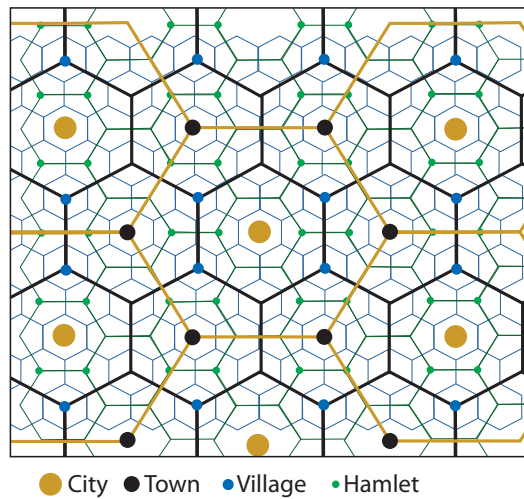
Figure 4.5. Hierarchy of cities

New and evolving technology has allowed for the mass production of food and other products, resulting in the need for larger storage areas and marketplaces. Urban growth has continued to evolve until an urban blueprint similar to the graph below developed.

If the black dots represent the central business district of the central place, what area do the black lines represent? The blue lines? The yellow lines?

IR-18: Central Place Theory Assessment Items

Use the map below and your knowledge of social studies to answer the following questions.



1. Which of the following generalizations is true based on the map above?
 - A. There are holes between services areas.
 - B. Overlapping service areas cause confusion for police departments.
 - C. City services are available to residents of these service areas.
 - D. Farmers receive fewer services than those living in the city proper.

2. According to Christaller —
 - A. some cities exist to serve other cities
 - B. industry is the foundation for city models
 - C. only some cities serve specific functions
 - D. there are no patterns in the development of cities