

# Empresario – Texas Colonization STEM project

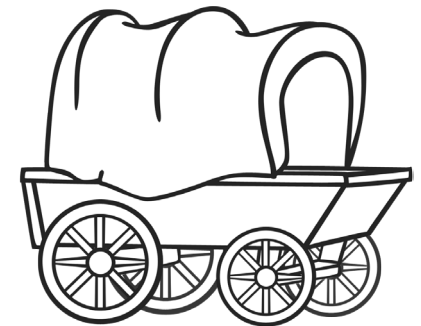
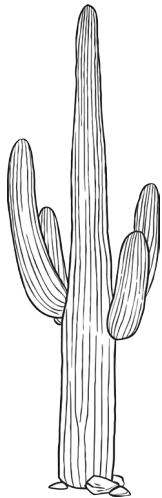
An 'empresario', the Spanish word for entrepreneur, is a person that is given permission to settle new land. However, the empresario is responsible for finding new people to settle in the area, and providing for the settlers.

Stephen F. Austin was an empresario for Texas, and later was named the 'Father of Texas'. He was given permission to settle in Texas from the Mexican Government because Mexico still owned the land.

For this challenge, you will be an empresario for a new town in Texas. You will be designing the layout and naming the town that you are establishing.

Remember to include buildings that will attract and provide for the needs of the new settlers, as well as pathways for settlers to walk or move a carriage through the town.

This is the year 1825. Your town should not include any modern brands or technology.



\_\_\_\_\_ founded by empresario \_\_\_\_\_

(name of town)

(your name)

What buildings will you provide in your town?

Building	Purpose



## City Math Analysis

Select four buildings in your town and calculate the area and perimeter of your building using the square units from the map you created.

Building	Perimeter ( $P = 4s$ or $P = s+s+s+s$ )	Area ( $A = b \times h$ )

# Turn your Map into a 3D Map of Your Town

This is an optional STEM activity once students have completed the map of their town.

Show your students some images of 3D city maps. Explain that 3D means that the buildings will be raised off the maps they create.

Give students an engineering tool kit:

- Toothpicks (structure of building)
- Tape
- Glue
- Scissors
- Paper
- Markers or colored pencils
- Mini marshmallows or playdough

Students can create structures of buildings using toothpicks and sticking them together using mini marshmallows or playdough. Remind students to cut the toothpicks to make a base that fits the perimeter of the space they created on their map.

Students can glue or tape decorated paper around the structure to label the building.

## Grading Rubric

	Named their town ( <b>6 points</b> )
	Listed and explained the purpose of a minimum of 4 buildings that are appropriate and important for that time period ( <b>20 points - 5 points each</b> )
	Created a map and/or 3D model of the town that is neat, well organized, includes all their buildings and pathways ( <b>50 points</b> )
	Correctly calculated the area and perimeter of four of their buildings ( <b>24 points - 3 points for each area and perimeter calculation</b> )
_____/100 possible points	