## Name:

## The Fourth Dimension

Draw a straight line in the space below.

The line has only one dimension. Now draw a square.

The square has two dimensions. A dimension is a property of space, or an extension in a given direction. Now, if you are able, draw a cube in the space below. A cube has three dimensions.

If a movie is in " 3 -D," it has three dimensions and not just the two dimensions of a flat screen.

In reality, you usually need to wear special glasses that trick your mind into seeing that extra dimension -- depth - up on the screen.

The distance from the floor to the top of your head is your height. Stretching your arms out, the distance from one fingertip to the other is an example of width. Putting your hands in front of you provides you with the third dimension-depth. Think about the future. It is likely that your size and shape will change over time, so in this case, time can be considered the fourth dimension.

Because our focus is on history, we will also work with that fourth dimension because the sizes and shapes of nations and regions can also change over time. In 1776, the United States consisted of only thirteen states along or near the coast of the Atlantic Ocean. By 1912, 48 states stretched across the mainland of North America. The United States expanded even further west as Alaska and Hawaii joined the union in 1959.

Soon we will go back in time to study the lands between the Tigris and Euphrates Rivers in a land that today is part of the nation of Iraq.

## Fill in the Blanks

A line has o $\qquad$ dimension while a s $\qquad$ has two dimensions. A dimension is a p__o_e_ty of $s \_$, or an e__ $t \quad n \_i \quad n$ in a given d__r_c__i_n. Our class will also consider a f __u_th dimension: t _ . The sizes and shapes of places will change over t $\qquad$ , so a map that is accurate at one time may not be accurate at another time.

## Answer in complete sentences

*1. Explain how the United States has changed over time.

