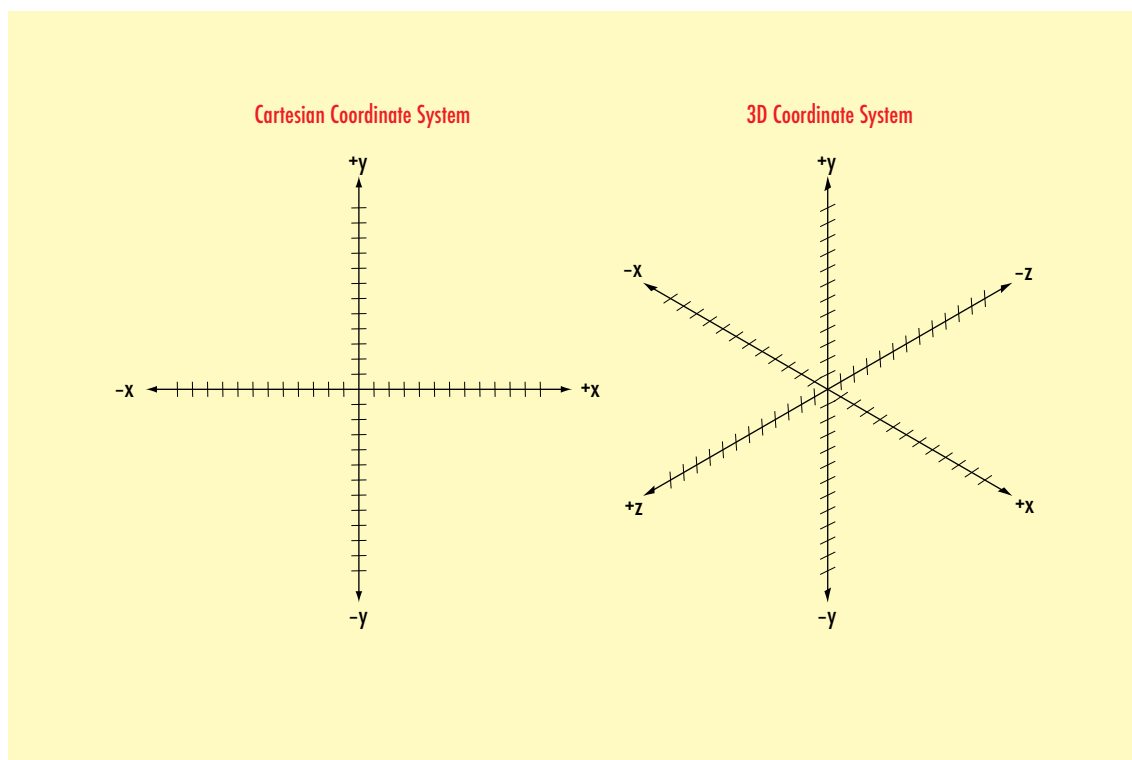


Coordinate systems

There are two main types of coordinate systems: the two-dimensional (2D) and the three-dimensional (3D) systems. Let's consider the 2D coordinate system first. Any location on a plane can be defined by two points – an x-coordinate value and a y-coordinate value. All points lying in a plane fall in one of the four quadrants formed by the two perpendicular axes. The x-axis and the y-axis (or coordinate axis) form the cartesian coordinate system or rectangular coordinate system.

In order to represent three-dimensional objects we need three coordinate axes (x , y , and z -axes) which are all mutually perpendicular to each other. As three mutually perpendicular axes cannot be drawn on a two-dimensional surface, the 3D coordinate system is depicted using isometric and oblique representation as well as multiple views.



ACTIVITIES

- 1 Create a mind map about the main coordinate systems.