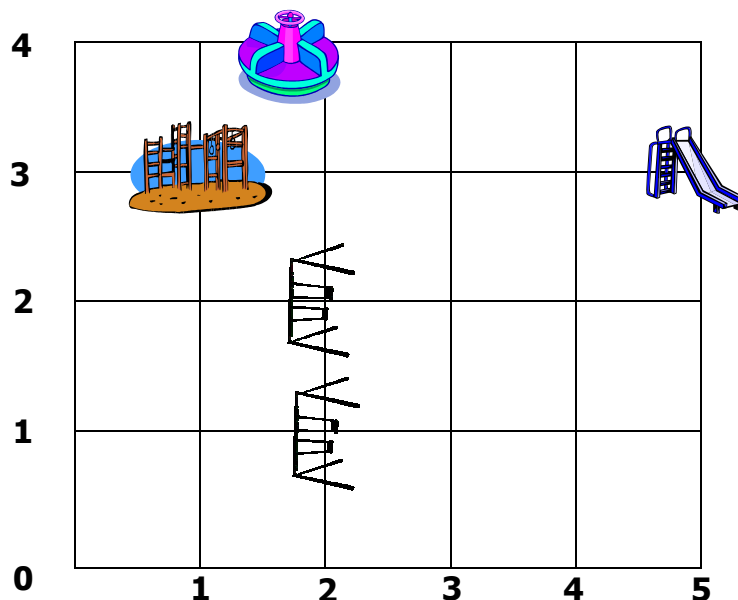


**Objective:** Student will specify locations and describe spatial relationships using coordinate geometry and other representational systems.

**Essential Question:** How can a coordinate grid help you give directions?

**Lesson Plan:**

1. Do KWL of what is known about coordinate grids.
2. Go to <http://www.teachers.ash.org.au/jeather/maths/dictionary.html> to gather information about coordinate grids.
3. Can the students determine from grid how the numbers are ordered (x number first, y number second)? Have students discuss with a partner the order of numbers in a coordinate. Review together.
4. Journal – “Now that you know coordinates are ordered numbered pairs of the location of an object, how could a coordinate grid help you give directions or find a location?”
5. Practice with Smart Board template. (Locate and name ordered pairs, write directions for moving from shape to shape using direction names...)
6. Develop a grid as a class - ask the class what type of map they would like to develop using a coordinate grid (examples: playground, classroom, cafeteria, etc.) Gather data. (Extension could be to graph results...) Once determined what to graph, measure the area off and determine the location of items to graph. Be sure to determine where the (0, 0) point will be. For example:



7. Use the graph to determine the coordinate of each piece of equipment. Practice giving partner directions using north, south, east, west, up, down, left, and right in moving around the playground.
8. In groups, students will develop their own coordinate grid of a park, carnival, classroom, etc. After developing their grid, students will write a descriptive paragraph explaining their grid design including explanations of why they chose to place the equipment in the place they chose.

**Additional resources:**

- <http://www.senter.co.uk/downloads/hlco.pdf>