

Making a Map

There are many different ways to make maps. When you make a map to your house for a friend, sometimes all you put on the map are recognizable landmarks such as a restaurant or an intersection, or the names of streets that your friend will need to turn on.

Native American maps at the time of Lewis and Clark used landmarks, and sometimes expressed *how long it would take* to get somewhere rather than a *measurable distance*. President Thomas Jefferson, however, wanted Lewis and Clark to make an accurate map of their route using specific distances and locations.



Captain Lewis.



Captain Clark.

This is the type of map you will make. First, choose a route. This could be from your front yard to your back yard. You can make a map of your route using the same methods that Lewis and Clark used.

Prepare for Your Journey: Like Lewis & Clark, you will need to prepare for this project. Reread these pages to sharpen your skills:

- Land Survey
- How to Use a Compass
- Dead Reckoning

You must decide if you would like to use the triangulation method of measuring distance from the “Land Survey” exercise, or dead reckoning.

Plan Your Route:

After you have decided what route you would like to map, identify a few points that you will use on your map and quickly sketch these on to your piece of paper. These could be trees, fence posts or anything that someone using your map at a later time would recognize.

- Label these points A, B, C, etc.
- Start at Point A. Label Point A on your map and look at your compass to figure out where north is. Mark the direction north on your piece of paper using the letter “N” and an arrow. Be sure to keep this the same for the whole map.
- To put Point B on your map, use the compass to figure out which direction it is in relation to Point A. Use triangulation or dead reckoning to figure out the distance between the two points. Add the distance and the direction to your sketch.
- Repeat this procedure from Point B to Point C, Point C to Point D, etc.
- Congratulations! You’ve created a map.

Check the Distance:

For fun, check your distances with a tape measure or using triangulation or dead reckoning. Which one is easier? Which one is more accurate?

If you would like to make your map *more* accurate, you can redraw it to *scale*. This means that you make a smaller distance, such as an inch, represent a larger distance such as a foot or a yard, and you keep this representation the same for the whole map. You can also correct your angles using the compass measurements that you took.

