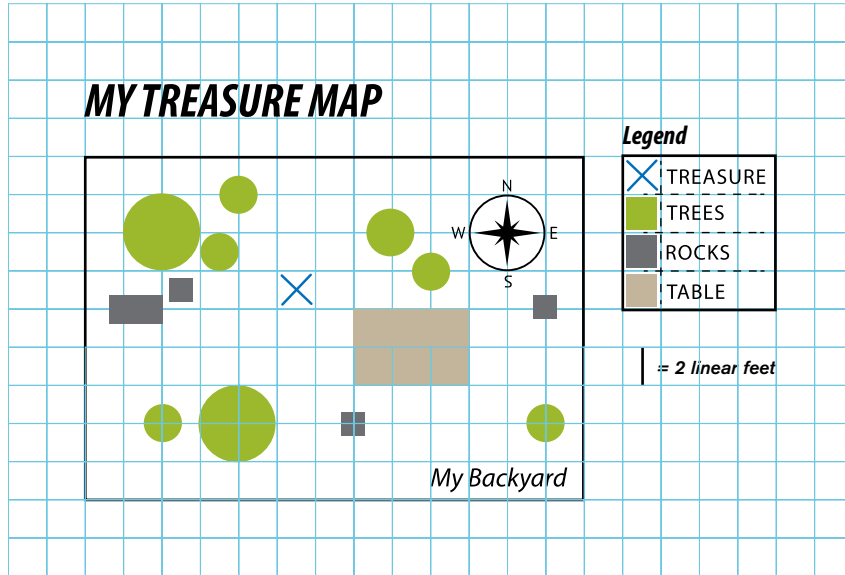


Are you looking for something to do to keep your brain active and engaged? We're here to help with Science at Home! You can do these fun science activities using commonly found items. You can also visit us at the Museum's [Science at Home](#) page for additional resources.

DIY Treasure Map



A Child's Introduction to GIS

GIS, which stands for "Geographic Information System," refers to digital map creation and interpretation. It is a critical technique used by scientists in every field to answer questions about the past, present and future.

In this activity the participant will learn how to make an accurate map of a real location. They will begin by hiding some "treasure" in a safe location inside their house, or in their yard. The location of the treasure will then be drawn out on paper, with the boundaries of the environment and any markers in the environment (*trees, rocks, etc.*) all to scale with distances from each other accurately represented.

Materials:

Compass
Measuring tape
Graph paper
Crayons, colored pencils, markers
Ruler

Instructions:

1. Choose a safe location, such as your room or your yard.
2. Hide a treasure, but don't forget where it is!
3. Draw a rough sketch of the space's boundaries on some scrap paper. Measure each side of each boundary with measuring tape and write down the dimensions.
4. Take the largest number, say, 30 feet, and divide by the number of squares running along the length of the paper. This is how many feet each square on the graph paper represents. Now we have an accurate scale. Write it down on the graph paper.
5. Draw the boundary on the graph paper using the squares to create an accurate representation of your space. For example, if a boundary is 30 feet wide, and each box represents two linear feet, then your line should span 15 boxes.
6. Use a compass to determine the location of north, so that the map reader knows which direction to look to find markers and the treasure. *To learn how to make and read a compass, visit [Science at Home: Making a Compass](#)*
7. Use your measuring tape to measure the locations and widths of any objects in your space, from chairs to trees. The more objects you draw, the easier it will be for someone to read your map and find the treasure.
8. Objects of the same kind should all be drawn the same way, with the same colors, so that a map legend can be drawn afterwards. Don't forget to mark where the treasure is!
9. As a bonus, you may write a set of directions that the map reader must follow to find the treasure. For example: Starting at the back door, walk north 20 feet until you reach the oak tree. Then, face west and continue 15 feet until you reach the statue that looks like a frog, etc....

Having fun?

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DIY Treasure Map: Graph Paper

