1. How does spatial autocorrelation differ from point pattern analysis
   1. Spatial autocorrelation looks at spatially continuous observations and their similarity of values, point pattern is just clustering of single, binary points.
2. What is a spatial weight matrix ?
   1. A representation of the relationships between the objects (shapes geometries) in your data
3. What is the difference between k neighbours and distance
   1. K is based on the number you set e.g. 4 will be 4 closest
   2. Distance selects all neighbours within a distance such as 1km.
4. What does standardization permit
   1. Comparable spatial parameters e.g. if one unit has 20 neighbours and another has 2 the results are standardized in the weight matrix
5. What does Moran’s I show us
   1. Shows how similar surrounding objects (based on the weight matrix) are to the current one, with a value of 1 = clustered, 0 = no pattern, -1 = dispersed
   2. Global Moran's I compares each spatial unit to the neighbours and then gives an average of all the differences identified
6. What does Local Moran’s I show us
   1. gives a value for each spatial unit in relation to neigbhours
7. What is so important about z scores?
   1. allows us to state if our value is significantly different than expected at this location considering the neighours
   2. We expect randomness following a normal distribution
   3. If it has a high score it is in the trail of the distribution and therefore not what we expected
8. What is a moran plot?
   1. we plot the value of spatial unit (against the average neighbouring values)
   2. The slope of the line is Moran’s I
9. What is a spatial lag
   1. comparing our value to neighbouring values
   2. the neighbouring values are having some sort of influence on our value
10. How is Getis-Ord Gi\* different to Local Moran’s I
    1. It compares the local sum in the neighbourhood to the sum of all features
    2. We are summing
    3. It is a local to global comparison
    4. In Moran’s I it is Difference between a value and neighbours \* sum of differences between neighbours and mean