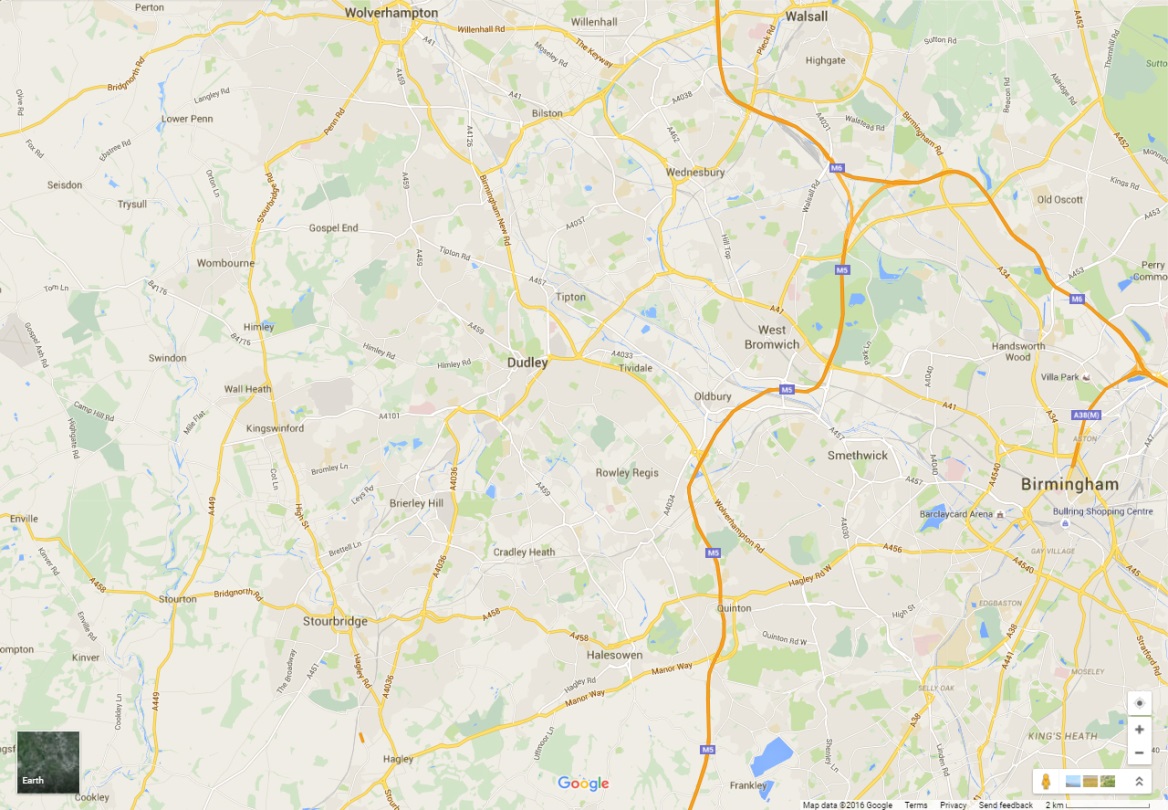
# Unit 2.1 – Algorithms;

# Lesson 1 – Introduction to Algorithms

## Activity 1

### Low

****For the map below, identify how abstraction would be used to represent the map in a computer.

Draw the map again, below, but in your map

* Draw the places as circles, with the place name inside
* Draw the lines between the places
* If the road(s) have names, write them on

What else might the computer store in its map

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| --- |
|  |

### Birmingham mapMedium

For the map below, identify how abstraction would be used to represent the map in a computer.

1. What variables would you need?

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| --- |
|  |

1. How would you represent the distances between places?

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| --- |
|  |

1. What could you ignore on the map? What don't you need in the computer?

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| --- |
|  |

1. Draw a version of what this map will look like in the computer

### Birmingham mapHigh

For the map below, identify how abstraction would be used to represent the map in a computer.

Describe how this map would be represented by a computer, consider the variables and objects that would be used, and the elements that would be ignored.

|  |
| --- |
|  |

**Extension:** Think about a second scenario where a real life problem, or object, would need to be developed into a computer model. How would abstraction be used to represent this problem, or object, in a computer?

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