## TRAVELLER CHALLENGE INSTRUCTIONS + WORKSHEET

Print at least one copy of this worksheet for each team participating in this Challenge.
Starting from point $A$, find the shortest route you can that passes through every red dot and returns to point A again. You can only travel vertically and horizontally between dots. You are allowed to travel between the same two dots more than once.

Count the total length of your journey by counting the number of times you joined a pair of dots remembering to include extra length if you travelled between the same dots more than once.

Remember to try plenty of combinations. There are 14 red dots you need to travel between, which means even if you always take the mos ${ }^{+}$direct routes between red dots there are over 3 billion


