



Title	The Supply Chain (Mystery) Challenge
Key Stage(s)	KS4
Subject(s)	Business Studies, Enterprise Education, Geography
Objectives	Introduce the idea of global supply chains Understand the significance of international trade to source materials to produce well known products Recognise the crucial role of logistics in today's global economy
Duration	30-60 minutes depending on quality of discussion
In brief	You challenge students in competing teams to maximise their points score by working out how a tennis ball is sourced and produced for Wimbledon

PREPARATION:

Read **'this document, the 'Teacher Clue Cards'** and the associated sheet, **'Teacher SCC Answers'**.

Decide on process that best suits you and your group:

- Students to work in competing pairs or small teams of 3-4 (max).
- Competing pairs/teams will require at least one copy of the document, 'Team Supply Chain Challenge'.....or project it for all to see.

Do print sufficient copies of the 'Teacher Clue Cards' to have 5 cards kept in reserve for every competing pair/team

- Every competing pair/team will also require one **blank** Team World Map, a pencil and a rubber. Having access to a pool of atlases or Google Maps is a good option.
- You can either project the **'Teacher SCC Answers'** on to a screen **at the end** of the exercise or copy sufficient copies to share with teams.
- The **'Teacher World Map'** is for your eyes only and is best copied on to an acetate in order that you can lay it over teams' maps to decide how many points their answers deserve.



PROCESS

1. **Introduce** the idea of a “supply chain”

Every item we buy has to be made somewhere first of all. For example, cars are made here in the UK and also overseas. But what is needed to make a car (steel glass, leather, plastic, carbon fibre, other materials etc) and where does the manufacturer source them from (= all over the world)?

This network of businesses involved in making and delivering a product to its customers is called “the supply chain”

2. Distribute and explain to your students their ‘**Team Supply Chain Challenge**’ (based on idea of Stobart Group), providing each team also with the blank Team World Map.

Working in pairs/small teams students are to study the information about the supply chain of a mystery product that is manufactured in Bataan in the Philippines, stage 12 of the supply chain.

Point out where Bataan is, at the northern end of the Philippines, indicated by a dot and the number, 12.

Each team must:

- a) Mark on their blank team map (by a dot and their number) the part of the world where the first 11 items in Table 1 **start** their journey.
 - b) Draw an arrow showing the **direction** the 11 items must travel.
 - c) Insert in the table on the map the mileage each item must travel, choosing from the 13 mileages in Table 2.
 - d) Once production is complete, the product is packaged. Show by another dot and number 13 where the packaging comes from and its route to Bataan. Insert the mileage for this part of the supply chain.
 - e) Finally figure out (marking your last dot, a number 14) **what** the mystery product is and **where** the customer receives their delivery. Complete the mileage and add up the total supply chain mileage.
- ### 3. Pairs/teams **earn points** according to the accuracy of their answers:-
- a) 5 points for identifying each of 13 locations (excl.no.12) on the map (65 points max.)
 - b) 5 points for every mileage identified correctly (65 points max.)



- c) 20 points for correct total mileage of global supply chain (50,570 miles)
- d) 20 points for correctly identifying the mystery product (tennis ball)
- e) 20 points for naming the customer (Wimbledon)
- f) There is a 10 point bonus for the team that comes up with the **biggest** number of different career opportunities in the network of supply chain businesses that collectively deliver this finished product to the customer.

The **maximum possible score** is therefore $65+65+20+20+20+10=200$

4. Pairs/teams may, if they so wish, “purchase” unseen clues from you in the form of ‘**Clue Cards**’, buying clues costing their team either 5 points or 10 points. They may choose to purchase all 5 Clue Cards if they wish but, the more clues they buy, then the more points will be deducted from their score.

An option to ‘hire’ use of an atlas or access to Google Maps is a useful optional extra. For instance, challenge teams’ time management skills by offering access @ 2 points per minute!

5. To work out the ‘winner’ you can:

- **either** ask teams to score another team’s answers
The sheet, ‘**Teacher SCC Answers**’, will provide most of the information needed.
An acetate version of the “Teacher World Map” is the easiest way to determine how accurately located each dot is. We suggest a full 5 points for a dot within the circle and 3 for a near miss.
You could project the “Teacher World Map” too, but the acetate version is recommended as an objective measure.
- **or** score teams’ answers yourself, especially the locations while teams score the more straightforward mileage elements.

6. The key learning points are:

- **Supply chains are often global in nature**, even for an apparently simple product such as a tennis ball
- It is the **role of the logistics sector** to get the right supplies in the right quantities at the right time to the right customer
- Logistics and supply chains offer a **huge number of career opportunities** all over the world.