Lesson plan 1: The economic problem

→ Alignment with Student Book: Chapter 1 (pages 4–11)
→ Resources: Worksheet 1: The economic problem; Student Book

Assessment Objective(s)
- AO1 Recall, select and communicate knowledge and understanding of economic terms, concepts and issues
- AO2 Apply knowledge and understanding using appropriate economic terms, concepts, theories and calculations effectively in specific contexts
- AO3 Select, organise and interpret information from sources to investigate and analyse economic issues

Learning objectives
By the end of the lesson, students should:
- understand the problem of scarcity
- understand opportunity cost
- understand production possibility curves
- understand causes of positive and negative economic growth.

Possible misconceptions and barriers
- Students may not understand the difference between a need and a want, especially if they or their family have a lot of disposable income.
- Students may need help understanding what an economic agent is. You can help by explaining what they are (consumers, producers, government) every time you use the key term ‘economic agent’.
- The resource ‘capital’ in economics does not mean the same as capital in business so make this clear.
- Students often find it difficult to grasp the idea that opportunity cost is the benefits lost from the next best alternative – it is NOT simply the next best alternative itself.

Specification alignment
- 1.1.1 The economic problem

Optional pre-task
1. Ask students to read Chapter 1 of the Student Book.
2. Ask students to find out what economic resources are and how they can be used.

Starter activity
(Estimated time to complete this activity: 10 minutes)
1. Ask the students to draw a line down the middle of a sheet of paper and title the left-hand side ‘Needs’ and the right-hand side ‘Wants’. Give them three minutes to write down all the needs and wants they can think of.
2. Once the three minutes are up, ask students what their needs and wants are. The purpose of this activity is to show the difference between wants and needs and to demonstrate that wants are infinite. If this is not demonstrated in the activity, prepare your own table to share with the class.
Differentiation

Opportunities for support: Support students by telling them that ‘needs’ are things they need in order to survive (e.g. clean water) and wants are things they would like to have but that are not necessary for survival (e.g. a new game).

Opportunities for challenge: Ask students to think about whether needs and wants are different for students in (think of a specific country). If so, why?

Alternative starter activity

(Estimated time to complete this activity: 10 minutes)

1. Use a sorting card activity, where students are given different pictures of goods (e.g. water, shelter, car, handbag, designer clothes). Students have to put each item in the correct column.

Main teaching activities

Activity 1

(Estimated time to complete this activity: 10 minutes)

1. Ask the students what the word infinite means. Then, from this existing knowledge, ask them to deduce what finite means. This will allow them to come to the definition by themselves.

2. Introduce the finite resources that students need to know: land, labour capital and enterprise. These are all the resources needed to make goods and services.
   a) Students could create a spider diagram summarising what each resource (factors of production) is.
   b) As a class, you could discuss why these resources are scarce. You may need to define the word ‘scarce’.

3. Remind students of the starter activity: everyone in the world has unlimited wants but we now know that there are limited resources in the world. This is the economic problem: what should countries make with finite resources? They need to decide what to produce, how to produce it and for whom to produce it.

Activity 2

(Estimated time to complete this activity: 15 minutes)

1. There are a lot of key words in this topic that set the foundation for future lessons. You may wish to ask learners to write down all these key words and their definitions. This activity could be completed in a separate booklet which could be used to record all key terms in the course. Key terms for this lesson are:
   a) resources
   b) finite
   c) infinite
   d) needs
   e) wants
   f) basic economic problem.
Differentiation

Opportunities for support: Provide definitions so students simply have to match each word to the correct definition. When you have checked their work, students can copy the correct definitions into their booklet.

Opportunities for challenge: Ask students to create the definitions themselves, either completely independently or by providing key words they must include in the definitions.

Activity 3

(Estimated time to complete this activity: 20 minutes)

1. Place students in groups of four and ask each student to choose a job role (made up or something they aspire to be in the future).
2. Then tell students that they have been stranded on a desert island, with only their job expertise, the items in their pockets, and the items that have washed up with them. Give each group 5–7 items that have washed up (e.g. a knife/ rope/ a crate of beans/ antibiotics).
3. Students have to learn how to survive on the island.
4. At various points during the activity, introduce a new task or scenario and asks students how they would respond to these new circumstances. Possible scenarios include:
   a) Water has damaged all the fire supplies. What will they do?
   b) There is a freak storm and their living areas are destroyed. What will they do?
   c) The islanders split into two groups because of a disagreement. How will they share their resources (if they decide to share)?
   d) One member of the group breaks their leg. What resources will they use to fix it?
5. The point of this activity is to illustrate the concept of scarcity into real life. Some people/countries/economies have very limited resources, so they have to make the most of what they have and try to adapt quickly to changing circumstances.
6. This activity works best with additional learning resources (e.g. palm tree posters around the room, new resources supplied in picture form rather than verbally, sound effects such as the thunderstorm or wave sounds, etc.)

Activity 4

(Estimated time to complete this activity: 10 minutes)

1. Ask students to reflect on the ‘Island’ experience and consider the following questions:
   a) What went well?
   b) What could have gone better?
   c) What important decisions had to be made with the resources?

Activity 5

(Estimated time to complete this activity: 15 minutes)

1. The island activity leads on neatly to the concept of opportunity cost. Explain that, when making choices, you have to give up something (the option you do not choose). This is called a trade-off. Opportunity cost is the benefits lost of the next best alternative (the option you didn’t choose). For example:
a) If you have to choose between buying a drink or a packet of crisps at the shop, this choice is a trade-off. If you choose the drink (with the crisps being the next best alternative) you will lose the satisfaction of having your hunger pangs stopped. This is the opportunity cost, because stopping your hunger pang would be a benefit of eating the crisps.

b) If you have to choose between doing homework, going to sleep or seeing friends, you may choose to see friends. If going to sleep was the next best alternative, the opportunity cost will be feeling rested and ready for the day after an good night’s sleep.

2. List five trade-offs on the board and ask students to work out what the opportunity cost for each one. For example, What can you do at the weekend?
   a) Watch a new film at the cinema
   b) Spend time with your younger brother
   c) Help your parents tidy the garden
   d) Practice your drawing
   e) Bake a cake

**Differentiation**

*Opportunities for support:* Give students a definition for opportunity cost and a written/picture example. Move around the classroom providing support to any students who seem to be struggling.

*Opportunities for challenge:* Ask students to identify two opportunity costs they might face if they were in government.

**Alternative activity**

1. Give each student a week’s budget (e.g. 100GBP) and a list of possible activities. Ask them to decide which activities they will complete. This will encourage them to think about what they want to do most and what they will have to miss out on as a result.

2. Discuss their findings and write any new key terms in their key term book.

**Activity 6**

(Estimated time to complete this activity: 10 minutes)

1. Explain to the students that we can show the resources in an economy and show whether they are being used to their potential using a graph called a production possibility curve.

2. Draw an outline of a production possibility curve and explain that all the resources in an economy can be placed in one of two categories: consumer goods or capital goods.
   a) Consumer goods are goods which consumers purchase (e.g. cheese)
   b) Capital goods are equipment used to make other (consumer) goods.

3. Add a PPC curve to your diagram. To familiarise students with the vocabulary, break it down and ask them to repeat it as loudly as possible. The PPC shows the maximum level of output an economy can produce when all of its resources are used. It can make a different combination of goods with the resources, depending on where it is on the curve, but when the dot is on the curve, no more goods can be produced.
4. Explain that:
   a) You can move to any point ON the curve by using more or less of capital or consumer goods. This is movement along the curve. By moving along the curve, there is an opportunity cost.
   b) The dot cannot be to the right of the curve as it is impossible to produce more than the maximum potential level of output (shown by the PPC curve).
   c) If the dot is inside the curve (rather than on it), this means there are underutilised resources (e.g. unemployment).
   d) The curve can shift inwards and outwards: inwards = negative economic growth, outwards = positive economic growth.

Activity 7
(Estimated time to complete this activity: 15 minutes)
1. Ask students to explain how improved efficiency, education and training, and new resources could cause positive economic growth.
2. Explain how resource depletion, weather and war could cause the PPC to shift inwards.
3. This activity could be completed on a spider diagram or in bullet point form, then shared with the class at the end.

Differentiation
Opportunities for support: Students could be supported by working in pairs.
Opportunities for challenge: Students could be encouraged to work on the development of their points (point → this means → therefore). This will strengthen their exam technique.

Activity 8
(Estimated time to complete this activity: 10 minutes)
Ask students to complete Worksheet 1: The economic problem.

Differentiation
Opportunities for support: Students who are struggling could be supported by students who have already finished.
Opportunities for challenge: Students who have finished could assist students who need support.

Plenary: ‘Text a friend’
(Estimated time to complete this activity: 5 minutes)
• Provide mobile phone print outs with the screen blank for student to write in.
• Give students five minutes to write two things they have learned in this lesson on the phone screen and then stick it in their books.

Homework
(Estimated time to complete this activity: 30 minutes)
Ask students to read through the Case study ‘Production possibility curves’ and complete questions 1–5 from page 11 of the Student Book.
Alternative homework
(Estimated time to complete this activity: 30 minutes)
Ask students to create an A4 poster of fully-labelled PPC diagrams, with each diagram showing a different shift/movement. This will be useful for revision purposes.

Advice for non-specialists
• Read Chapter 1 beforehand.
• The easiest way to help students understand the difference between wants and needs is to get them thinking about things that are relevant to them (e.g. what they personally want and need – necessities vs luxuries).
• Students will need lots of practice using PPC curves and understanding the shifts. Quick fire questions about what causes an inward/outward shift are another way to help students remember.
• This is the first of many graphs students will need to learn. A precedent needs to be set that all diagrams have to be drawn with a ruler and fully labelled. This is important if students are to use graphs confidently in an exam and learn how to describe what they show.
• It may be useful to ask students to create a booklet of diagrams which they can add to whenever they learn a new diagram.
• Key concepts to understand before you teach are:
  • scarcity
  • opportunity cost
  • factors of production (resources) – see Chapter 14.
• Key words to understand before you teach are:
  • scarcity
  • opportunity cost
  • production possibility curve.
Worksheet 1: The economic problem

1. Define the phrase ‘production possibility curve’.

2. Fully label the graphs below. Using the graphs, explain how the PPC will be affected by the following scenarios:
   a) war breaking out in a country
   b) a very dry summer
   c) improved education
   d) production of more capital goods
   e) an economy operating at more than its potential
   f) discovery of new technology.

   a) [Graph]
   b) [Graph]
   c) [Graph]
Answer ALL questions. Write your answers in the spaces provided.

QUESTION 1

a) What is the name given to products that are intended to have a life of more than 3 years from when they are made or bought? \(1 \text{ mark}\)
   
   A. durables
   B. provisions
   C. groceries
   D. public goods

b) What is meant by ‘command or planned economy’? \(1 \text{ mark}\)

   A. A market that relies least on the public sector for the provision of goods and services
   B. A market which relies on both the public sector and private sector to provide goods and services
   C. A market which relies entirely on the public sector to choose, produce and distribute goods
   D. A market that relies on neither the public sector nor private sector to provide goods or services

c) What is meant by the term ‘capital intensive’? \(2 \text{ marks}\)

   ………………………………………………………………………………………………………………………………………………………………

   d) Define the term ‘tertiary sector’. \(1 \text{ mark}\)

   ………………………………………………………………………………………………………………………………………………………………

   e) Define the term ‘total revenue’. \(1 \text{ mark}\)

   ………………………………………………………………………………………………………………………………………………………………
A firm makes 1500 items. Its total revenue, total fixed costs and total variable costs are in the table below.

**Figure 1**

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Fixed Costs</th>
<th>Variable Costs</th>
<th>Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>1500</td>
<td>75000</td>
<td>86000</td>
<td>250000</td>
</tr>
</tbody>
</table>

f) Using the data in Figure 1, calculate the profit earned by the firm when it makes 1500 items. You are advised to show your working. **(2 marks)**

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Using Figure 2 below, draw the effects of a nationwide promotional campaign promoting the health benefits of blueberries on equilibrium price and quantity. Label the new curve, the new equilibrium price and quantity. **(3 marks)**

![Figure 2](image_url)
International GCSE Economics

Paper 1: Analyse (6 marks)
In 2016, Apple sold 211.88 million iPhones. In the second quarter of 2017, they sold 50.76 million iPhones worldwide.

Foxconn, the Taiwanese manufacturing giant and a major manufacturer of Apple products, announced that it has launched a three-phase plan to automate its Chinese factories using software and in-house robotics units.

**Question**

With reference to the data above and your knowledge of economics, analyse why the unsuccessful division of labour may have encouraged this decision.
**Student answer 1**

The division of labour is when a business breaks down the production process into small parts, with each worker allocated to a specific task. This means that work can be monotonous for workers who work in the Chinese factories. Therefore they may make more mistakes because they are bored and not concentrating when making the Apple iPhones. If one stage of production depends on another, a problem in one stage can halt production.
What are the strengths and weaknesses of this answer?

Strengths:

• Excellent knowledge of key terms

Weaknesses:

• The answer is not developed very well in the second point.

• There’s limited reference to data.
Student answer 2

The division of labour is when a business breaks down the production process into small parts with each worker allocated to a specific task. Apple sold over 211.88 iPhones in 2016. This means that the employees who worked on the manufacturing had to do the same repetitive task many times, which can be quite boring. Therefore, Foxconn may have found that employees became dissatisfied and poorly motivated, which impacted their productivity. If employees were not working fast enough, this could have impacted their ability to meet targets and the high demand for iPhones.

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When there is a division of labour, workers can be highly specialised. If a specialised iPhone assembly employee was absent, this could have halted production if other employees did not know how to do their job. Therefore, Foxconn may have struggled to meet manufacturing targets. As such, software and in-house robotics units could help them overcome this problem.
What are the strengths and weaknesses of this answer?

Strengths:

• Excellent use of examples
• Good use of data
• Clear analysis

Weakness:

• Could be tied together in a stronger conclusion