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| **Project ID: 2021-1-CZ01-KA220-SCH-000034484**    **COURSE FOR ENVIRONMENTAL EDUCATION**  *e-Modules: Teaching Learning activities and their technology enhanced material set*  ***DISCLAIMER***  *Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.*  **COURSE AUTHORS**   |  |  | | --- | --- | | AFAD Logo T.C. Afet ve Acil Durum Yönetimi Başkanlığı png image ...***Güray Karakaya***  *Contributed by Murat Senger*  Logo of creative common licence  ***COURSE SHARING LICENCE*** |  |   You are free to:   * Share — copy and redistribute the material in any medium or format for any purpose, even commercially. * Adapt — remix, transform, and build upon the material for any purpose, even commercially. |

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| **MODULE 1** | **HUMAN AND NATURE** |
| **PART 2** | **The effects of unplanned settlement, industrialization, transportation and other actions** |
| **Lesson 1-2** | **Urbanization - Causes and Consequences** |

**SUMMARY**

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# 1. COURSE TIME, TARGET AND TOPIC

* **Age of target students: 15+**
* **Teaching time: 2 hours**
* **Disciplines: Geography, Human Sciences, Maths, Science, Technology**
* **Title: The effects of unplanned settlement, industrialisation, transportation and other actions**

# 2. COURSE OBJECTIVES

## Competences promoted in this lesson:

* **1. Communication in foreign languages competency - CLIL -**
* **2. Mathematical competency and basic competencies in science/technology - STEAM -**
* **3. Social and citizenship-related competencies**

## Objectives:

**Developing students’ Systems–thinking competence, anticipatory (future thinking) competence, interpersonal competences – collaboration, critical thinking, integrated problem-solving competence.**

## Lesson objectives:

* **The students comprehend the positive and negative effects of un/planned settlement,**
* **The students discuss industrialisation, transportation and other activities on nature.**

# 3. LEARNING – TEACHING PROCESSES

There are 4 activities in this lesson:

1. **ENGAGE:** B**uild up your own city**
2. **EXPLORE: Ask and Answer - Causes and Consequences of Urbanization**
3. **EXPLAIN: Read the text and watch the video -**WHAT IS URBAN PLANNING? -
4. **EXTEND: Study the materials delivered. Discuss your notes in groups- explain and comment on  ‘urbanisation’ and health/injustice/disasters/ migration'.**

# 4. EVALUATION

There will be a Forum Event where students present their solutions and proposals to policymakers.

INSTRUCTIONS for STUDENTS: Please work in groups, discuss the problems caused by unplanned urbanisation and create a solution proposal.

**Group 1. Urbanisation and Health (Sanitation and clean water shortage, carbon emission, pollution, etc.)**

**Group 2. Urbanisation and environmental injustice (Crime rates, injustice in services, etc.)**

**Group 3. Urbanisation and migration (urban sprawl, overpopulation, etc.)**

**Group 4. Urbanisation and disasters (Inadequate infrastructure, etc.**)

# 5. DOCUMENTS

### ENGAGE

**BUILD UP YOUR OWN CITY**

**Adapted from April Smith’s S.T.E.M Class (Simulation Activity )** [APRIL SMITH'S S.T.E.M. CLASS - HOME](https://www.aprilsmith.org/)

**DIRECTIONS:**You are given that squared paper below. Read about the history of Manisa and draw certain things instructed on your paper. You should draw the buildings in the correct size and have group discussions about the buildings. Please note that the sizes for the buildings are given in squares in brackets and given for each – when there are more than one, you should multiply accordingly.

1. Manisa became an education centre for the Ottoman Sultan’s sons in 1390, and Çelebi Mehmet called it a city in 1410. He tells the residents to build the following items. Please draw them anywhere on your map, but they must be the correct size.
2. **Regular houses (1 sq); 1 Mosque (2 sq); 1 Store (2 sq); 1 Inn (4 sq); 1 City Hall (4 sq).**
3. Manisa becomes the second capital town. The residents—Ottoman locals—build the most characteristic monuments of Ottoman architecture. Please discuss the buildings and draw them anywhere on your map in the correct size.

***2 Külliye*s (8 sq); 2 Baths (2 sq); 2 Caravansaries (6 sq); 1 Palace complex (14 sq); 2 Pavilions (3sq); 4 fountains (2 sq)**

1. Manisa is close to the trade roads, and more people are moving there. Please draw up the requirements for the newcomers.

**12 Regular houses (1sq); 3 Wealthy houses (4 sq); 1Covered Market with 10 Shops (10sq) ; 2 Inns (4sq) ; 2 Mosques (2sq) ; 1 Hospital (8 sq) ; 1 School (6 sq) ; 2 Roads (3 sq width); 1 Cemetery (8sq)**

1. Manisa has fertile land and is famous for its vineyards. The locals also grow wheat, cowpeas, lentils, chickpeas, barley, corn, rye, onion, oats, sesame, cotton, rice, grapes and various fruits. Please draw the following anywhere on your map. They must be the correct size.

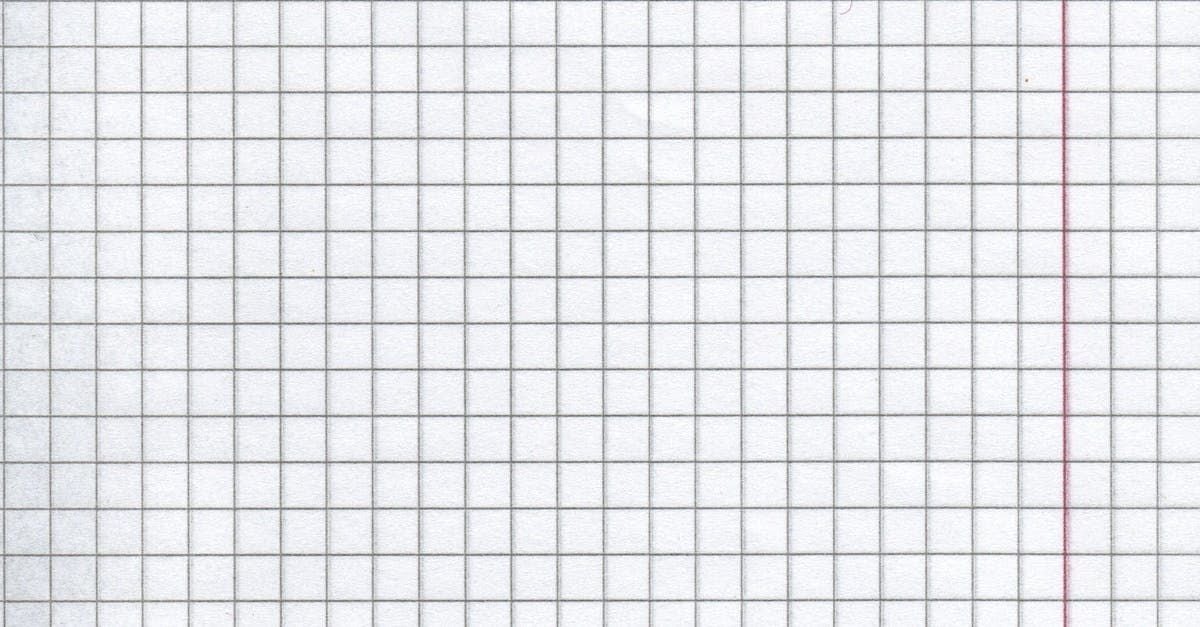
**7 Farmhouses (5 sq); 8 Tenements for the farm labourers (2 sq); 3 Wealthy houses (4 sq); 1 Covered Market with 20 Shops (20sq); 1 Hospital (8 sq); 1 School (6 sq); 2 roads (3 sq width); 2 Factories (6 sq) ; 2 Mills (2 sq).**

1. The locals grow cotton and make it into yarn on their home looms. They build dyehouses to dye them. In the 17th century, there were 22 dyehouses in Manisa and some more new constructions.

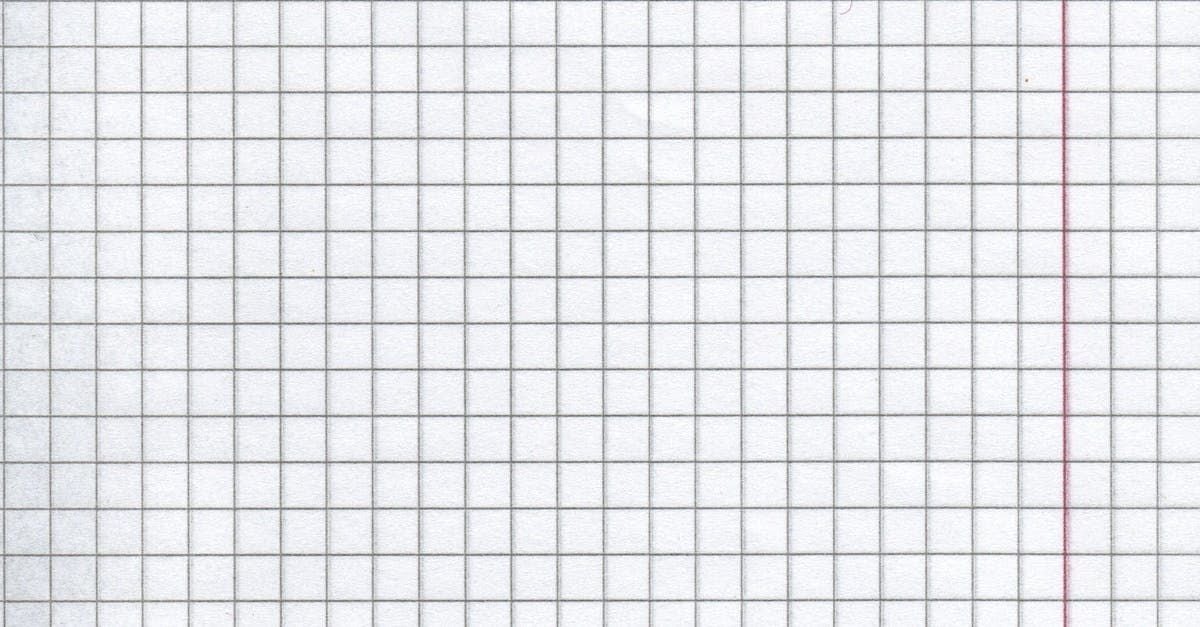
**3 Factories (6 sq); 6 Tenements for the factory workers (2 sq); 3 Banks (4 sq); 2 Post Office (4 sq); 1 Jail (4 sq); 22 Dyehouses (2 sq); 10 Shops (2 sq) ; 4 Wealthy houses (4 sq); 2 Sideroads (2sq width).**

1. Leather making becomes an important means of living in Manisa. Leather is an item needed by both the people and the army to produce shoes, horse harnesses, whips, flasks and flask products. Leathers are processed in tanneries and by leather craftsmen called ‘deb-bag’. The merchants ship the leathers to Istanbul. The town gets developed and new constructions are built accordingly. Please draw them anywhere on your map in the correct size.

**3 Tanneries (4 sq); 2 Factories (6 sq); 9 Tenements for the workers (2 sq); 2 Banks (4 sq); 12 Shops (2 sq); 4 Wealthy houses (4 sq); 1 Rail-road (3 sq width); 2 Jails (4 sq); 1 Hospital (8 sq); 2 Libraries (4 sq); 3 Schools (6 sq).**



**RIVER**



### EXPLORE

Students are asked some questions about their drawings and expected to discuss and explore the topic of 'Causes and Consequences of Urbanization'.

**Suggested Questions for Discussion:**

1.      Was it easy for you to locate your drawings?

2.      While locating them, what did you pay regard to?

3.      What was the main reason for the need to draw new things? Can you make connections between new means of living and the new constructions?

4.      What and where would you build? What are some other requirements of a developed town?

5.      As a town becomes more congested, which problems do the city planners face?

### EXPLAIN

**Students are asked to read a text and watch a video - both titled WHAT IS URBAN PLANNING? They are asked to take notes about urbanisation, discuss their notes in groups, and explain 'urbanisation'.**

**INSTRUCTIONS for STUDENTS: Read the text and watch the video, both titled WHAT IS URBAN PLANNING? Take notes about urbanisation. Discuss your notes in groups and explain 'urbanisation'.**

**Original text: What is urban planning? (Copyright © 2016 The Open University)** Link to original text [OLCreate: ContextEnvt\_1.0 Study Session 6  Land Use and Urban Planning: 6.2  What is urban planning? | OLCreate (open.edu)](https://www.open.edu/openlearncreate/mod/oucontent/view.php?id=79941&section=4)

***(Adapted text to read):* WHAT IS URBAN PLANNING?**

**Urban planning is about designing towns and cities to function effectively and meet the needs of people living in them. This is a technical process, concerned with bringing benefits to people, controlling the use of land and enriching the natural environment. It requires careful assessment and planning so that community needs such as housing, environmental protection, health care and other infrastructure can be incorporated.**

**Urban planning means managing urban development so that uncontrolled and haphazard building is prevented. Unplanned development in peri-urban areas can lead to towns and cities spreading out and extending the impacts of change of land use over an ever-increasing area. In central urban areas, unplanned development gives rise to densely-packed, single-storey housing with narrow alleys making it very difficult to provide necessary services for the inhabitants.**

**Unplanned urban development is characterised by poor housing quality and by the lack of supporting infrastructure and services. These inadequate services can include any or all of: electricity, water supply, sanitation, drainage, solid waste management, roads and transport facilities, shops and schools and health care. The lack of available space in central urban areas also results in people building insecure homes in unsafe places.**

**Historically, the concept of urban planning arose in Europe in the 19th century (Corburn, 2005). It emerged from the awareness that public health and infectious disease outbreaks were closely related to inadequate housing and poor sanitation, particularly affecting the urban poor. By the 20th century, the idea of land-use zoning was the dominant approach to urban planning. Zoning meant the creation of defined areas within a town that were designated for different activities such as residential, commerce, industry, etc. The aim was to improve urban living conditions by separating people from ‘noxious land uses’ (Corburn, 2005). However, zoning also had the effect of creating a social divide by separating areas where well-off people lived from those occupied by people with little or no income, with increasing inequality between the services and facilities available in different zones. Excluding people from living in central zones that were allocated for commerce and business resulted in increasing urban sprawl, where the effects of urbanisation and land-use change were spread over larger areas (UN-Habitat, n.d. 1). Recommended urban planning practice has since moved away from the zoning approach and currently adopts principles of integrated use designed to ensure the sustainability of future towns and cities.**

Link to video “WHAT IS URBAN PLANNING?”: [**https://www.youtube.com/watch?v=URLOGQhJWj0&ab\_channel=PlanetizenCourses**](https://www.youtube.com/watch?v=URLOGQhJWj0&ab_channel=PlanetizenCourses)

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### EXTEND

Students are asked to give information about Mary Mallon (using the internet Wikipedia links suggested below). They are guided to comment on sanitation planning and have further discussions on Urbanization and Health.

[Mary Mallon - Wikipedia](https://en.wikipedia.org/wiki/Mary_Mallon)

- Students are given an image and asked to comment on it. They are also shared with a link to study Urbanization and Migration.

[**https://www.mpg.de/11863336/migration**](https://www.mpg.de/11863336/migration)

-Students are given a letter of complaint written to the Mayor and asked to comment on the issue and make further discussions about Urbanization and Injustice.

[ht-poster.pdf (teachinghistory.org)](https://teachinghistory.org/sites/default/files/ht-poster.pdf)

-Students are given a research paper. Upon studying they are asked to comment on Urbanization and Disasters .

[Examining the coupling relationship between urbanization and natural disasters: A case study of the Pearl River Delta, China - ScienceDirect](https://www.sciencedirect.com/science/article/abs/pii/S2212420921000236)

**INSTRUCTIONS:** Study the materials delivered and take notes for each. Discuss your notes in groups- explain and comment on 'urbanisation and health/injustice/disasters/ migration'.

### EVALUATE

A Forum Event where students present their solution proposals to the policy makers about urbanization problems is held. Students study the problems caused by unplanned urbanization and create a solution proposal in groups.

**INSTRUCTION:** There will be a Forum Event where you will present your solutions' proposals to the policy makers about the problems caused by urbanization. Please work in groups, discuss the problems caused by unplanned urbanization and create a solution proposal.

Group 1. Urbanisation and Health (Sanitation and clean water shortage, carbon emission, pollution, etc.)

Group 2. Urbanisation and environmental injustice (Crime rates, injustice in services, etc.)

Group 3. Urbanisation and migration (urban sprawl, overpopulation, etc.)

Group 4. Urbanisation and disasters (Inadequate infrastructure, etc.)