CLIL

STEAM

TECHNOLOGICAL FIELDS • UDA 6: Mobility and Logistics

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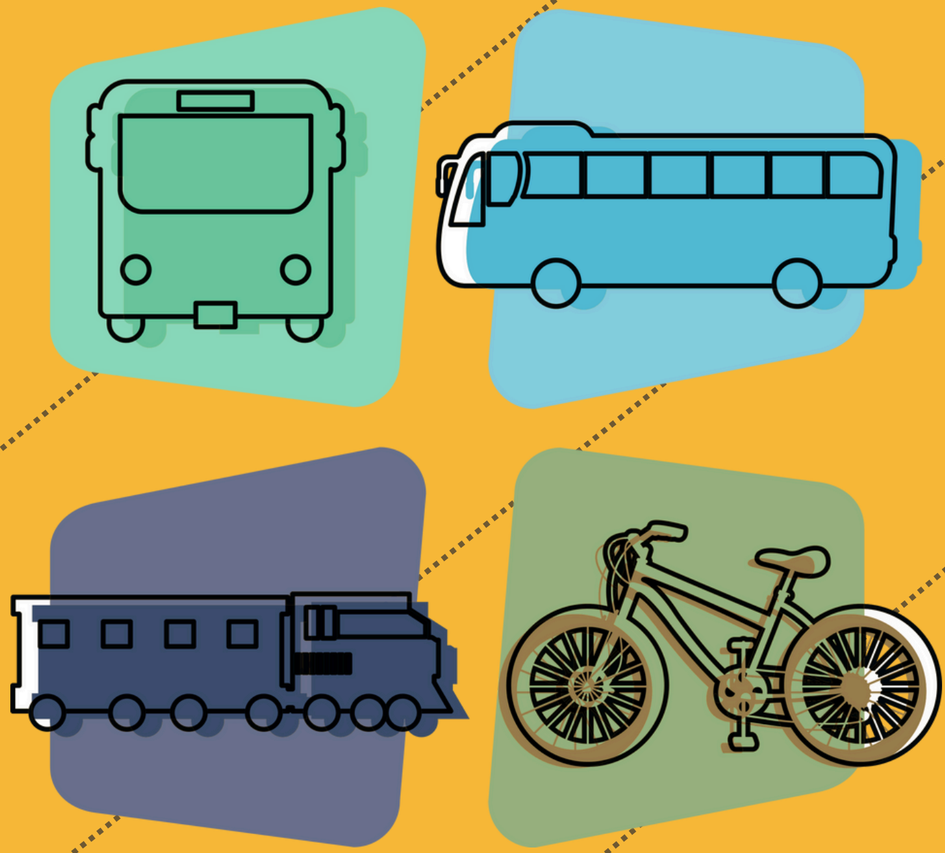
1. CREATE YOUR MAP

Look at the map, then draw your own map in your exercise book.



THE TRANSPORT SYSTEM

Land Transport

- Roads, motorways and railways
- Individual transport: bicycles, mopeds, motorbikes, cars
- Public transport: buses, trams, trolleybuses, trains
- Used to move goods and people over both short and long distances

Motor Vehicles

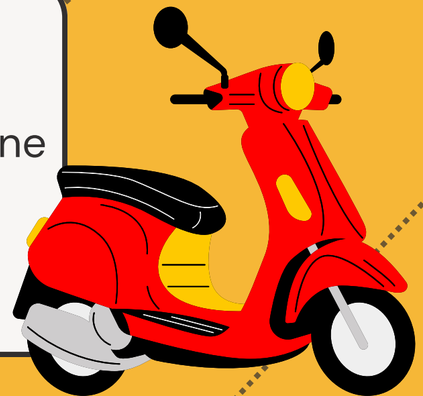
- Mopeds, motorbikes, petrol-powered cars
- Vehicles powered by petrol, diesel or gas

Electrified Rail Transport

- Electric trains

Low-Impact Mobility

- Pedal bikes and e-bikes, roller skates and inline skates, electric scooters, skateboards, hoverboards
- Electric vehicles



THE TRANSPORT SYSTEM

Water Transport

- Rivers, lakes, canals, seas and oceans
- Individual and shared transport: boats and other watercraft
- Includes passenger transport for tourism
- Used to carry goods and people over short and long distances

Air Transport

- Along designated flight paths
- Individual and shared air transport: aeroplanes, helicopters, drones
- Mostly used for long-distance travel and freight

THE TRANSPORT SYSTEM

Infrastructure

The physical systems that allow people and goods to move safely, efficiently and affordably.

Logistics

The organisation of the supply, storage, transport and distribution of goods and materials.

Sustainability

Sustainable mobility and logistics aim to:

- Improve the efficiency of transport systems
- Reduce environmental impact through greener transport and lower emissions
- Provide transport that is safe, accessible and environmentally responsible

2. CREATE YOUR OWN TEST

a. Indicate whether the following statements are true (T) or false (F).

1. Active mobility does not include electric vehicles.

   T F

2. Bicycles are more sustainable than aeroplanes.

   T F

3. Air transport is slower than land transport.

   T F

4. Logistics does not involve the sourcing of raw materials.

   T F

5. Internal combustion vehicles produce polluting emissions.

   T F

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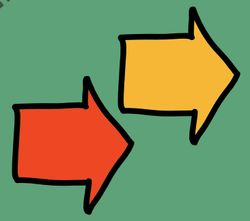
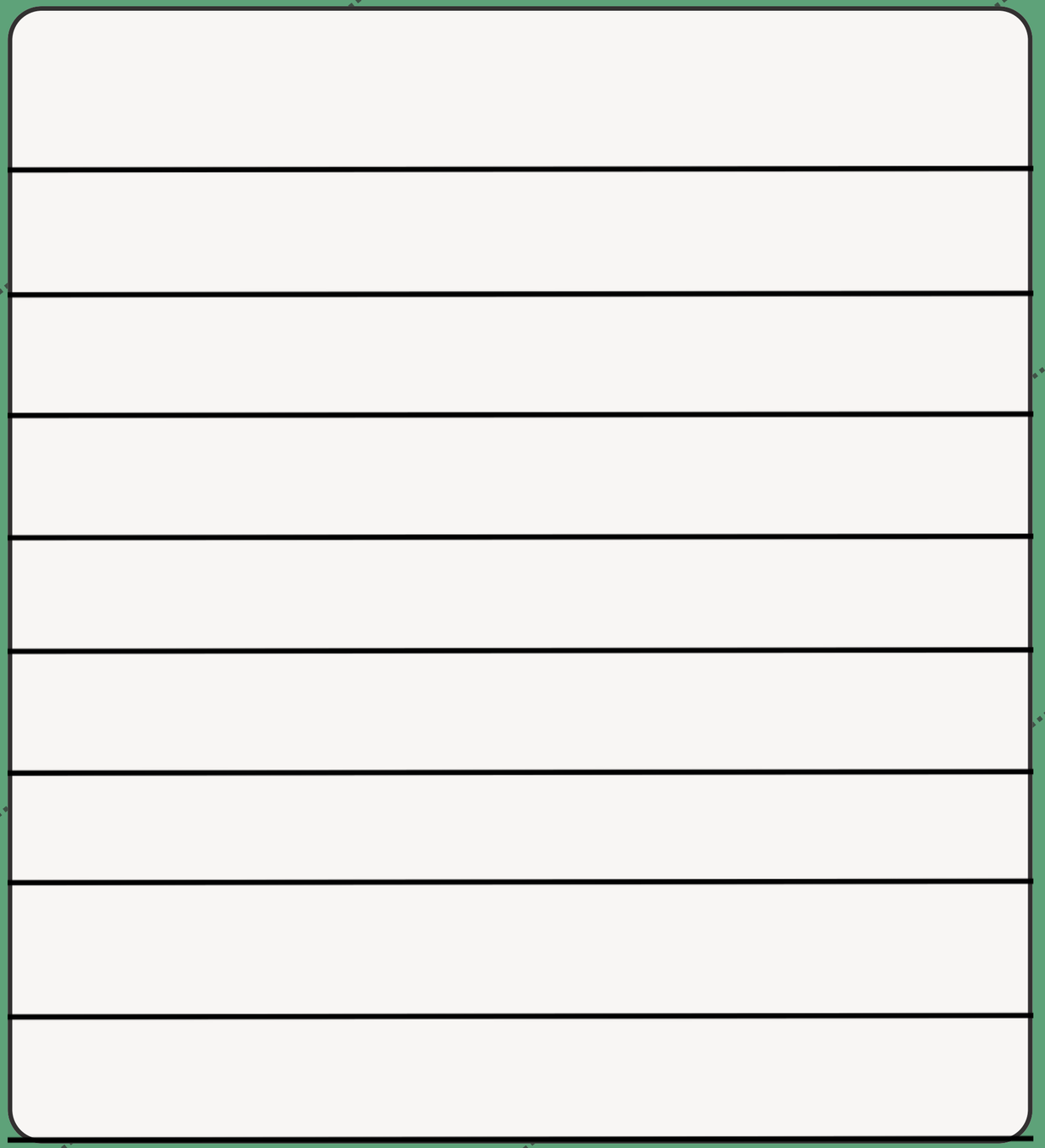
2. CREATE YOUR OWN TEST

b. Create Five New True/False Questions to Share with the Class





3.HOW TRAFFIC IS MANAGED IN YOUR TOWN OR CITY

Use the internet or visit your local council or traffic office to find out **what measures are in place to reduce the problems caused by heavy traffic**—such as accidents, congestion and pollution. Look into whether your local area has:

- Low-traffic zones (LTZs)
- Pedestrian areas
- Bus lanes
- Congestion charges or Ecopass schemes
- Cycle lanes
- Car-sharing schemes
- Bike and e-scooter sharing

Once you've gathered your information, create a short multimedia presentation to share with the class.

4. ROAD SIGNS

Road signs are designed to communicate information clearly and instantly. They include horizontal markings on the road surface, vertical signs, traffic lights, and additional signalling equipment. Before a newly built road can be opened to traffic, all necessary signs must be installed.

Choose a stretch of road around 100 metres long near your school or home. Use your phone to take photos of any road signs you recognise, and plot them on a map you draw yourself.
Then, select one of the signs and recreate it using technical drawing tools or CAD software.
You can work on this task individually or in a small group.

5. WALKING, CYCLING OR USING A SCOOTER

Article 140 of the Highway Code (General Rule of Conduct) states:
"All road users must behave in a way that does not endanger or obstruct others, and must always ensure road safety is upheld."

Choose one of the three ways of getting around—on foot, by bike, or by scooter. Look up the relevant rules in the Highway Code, and write a list of ten golden rules for being a responsible and considerate road user.
Illustrate each rule with a drawing of your own or an image you've created or sourced online.

6. TRANSPORT IN ITALY: KEY FIGURES

Use the data provided on transport in Italy to create clear and effective visual representations. Choose the type of graph or chart that best suits the information—such as a bar chart, pie chart, or line graph.

NEXT

6. TRANSPORT IN ITALY: KEY FIGURES

Every day in Italy, **around 38 million people over the age of 12 travel from place to place**. On average, each person makes 2.55 trips daily, amounting to a combined total of 1.96 billion kilometres travelled. Over 70% of these journeys cover distances of less than 50 km. Vehicle movements—by car, motorbike or bus—are concentrated mainly on local roads (23%) and interurban roads (58%).

Most journeys are made using **private vehicles** (62%), which tend to be older and more polluting than those found in other major European countries.
In 2023, goods transport in Italy reached over 580 billion tonne-kilometres. The vast majority—88%—was carried by road, followed by sea (9%) and rail (3%). Around 90% of road freight journeys were under 300 km, a range where rail transport struggles to compete.

Ports play a key role in Italy's international trade, accounting for 59% of cross-border goods movement, ahead of road (30%) and rail (11%). Ports are expected to remain vital hubs for freight transport in the future.