

Is a car really faster than a bike?

You need to organise a trip into town to go to an appointment. Which mode of transport should you choose?

Well, you sure know that the speed of a bicycle is lower than that of a car, but... is this true in all circumstances?

Overview “Is a car really faster than a bike?”

How to choose the best mode of transport?

Context
Everyday life
Work-related
Citizenship

Cognitive processes
Processing information
Reasoning
Critical thinking

Target group (incl. necessary prior skills and competences)

Learners who have followed the "Which is the fastest?" session, or who have already mastered the concept of speed.

Content
Number
Relationship
Using apps
Digital skills

Dispositions
Motivation
Collaboration

Outcomes and results

Choose the best transport mode in a specific context



Main information

Content	Relationships and ratio Classifying and ordering Digital skills
Target group	Learners who have either completed the "Which is the fastest?" session or who have already mastered the concept of speed.
Learning intention	<ul style="list-style-type: none"> – Numeracy for personal and private purposes – Numeracy for professional issues – Numeracy to understand society
Duration	1 lesson
Material and resources	Internet connection to use the apps
Group size	10 to 12 learners
Problem statement	This session is a continuation of "Which is the fastest?". Once the concept of speed has been mastered, the idea is to apply it to different real-life situations, in order to realise that speed is only an indication in itself, and that it must be supplemented by other criteria in order to make a reasoned choice.
Working questions	<ul style="list-style-type: none"> - Is vehicle speed a sufficient criterion for choosing a mode of transport in town? - How can an application be used to compare different modes of transport for the same journey? - What criteria should be used to choose the best mode of transport?
Learning outcomes and results	The students are able to: <ul style="list-style-type: none"> - Identify the criteria to take into account when making a choice - Compare results based on defined criteria - Make a reasoned choice
Reference to National Qualification Frame	Optional (country's decision)



Working plan

Time (lessons)	Description of content/activities	Material	Methodical and didactic information ¹
	<p>The teacher projects the document produced at the end of the "Which is the fastest?" session, indicating the speeds of various elements including the usual means of transport: car, train, bicycle, bus, scooter, motorbike, etc.</p> <p>Ask the learners if everyone agrees, regarding to this document, that a car is faster than a bike.</p> <p>Then, he projects the picture (appendix 1): what reactions does it provoke?</p> <p>And the title of a newspaper article (appendix 2): what could explain this?</p>	<p>See "Which is the fastest?" lesson</p> <p>Appendix 1 and 2</p>	Questioning
	<p>Working in pairs, the learners draw up a list of the factors that influence a vehicle's speed, specifically when travelling in the city.</p> <p>The proposed results are then pooled.</p> <p><i>Traffic density, time of day, red and stop lights, one-way streets, parking times...</i></p>		Collaborative learning
	<p>So, if the theoretical speed of a vehicle is not enough, how do you choose the fastest mode of transport for a journey in the city?</p> <p>One of the easiest ways is to use an app on your smartphone, provided you know how to use it properly.</p>		Questioning

¹ for description and explanation of kinds of tasks, HITs and other background information please consult the teachers'/user's guide

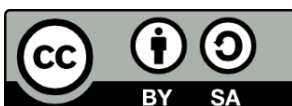


	<p>Which ones do learners know about or use? Do they know how to use it to compare different modes of transport?</p>		
	<p>The trainer projects his smartphone screen to help the learners identify the steps and information to be completed in the app.</p> <p>He places particular emphasis on identifying the various pictograms indicating the mode of transport.</p> <p>Depending on the learners' level of autonomy, trainer can provide a written procedure, based on screen copies (see appendix 3).</p> <p><i>In the example given, the car is only in 3rd place, behind the bicycle and the metro, and that's without taking into account the time needed to park.</i></p>	<p>Internet connection</p> <p>Smartphone's screen projection</p> <p>Procedure (appendix 3)</p>	<p>Explicit teaching</p>
	<p>The trainer then asks the learners to use their smartphones to compare different common journeys:</p> <ul style="list-style-type: none"> - From their home to the training venue - From home to a leisure venue they usually visit - From home to an institution - From home to their company (for employees or trainees) 	<p>Internet connection</p>	
	<p>Transfer</p> <p>To make it easier to embed this practice, carry out this comparative study each time a trip is organised during the training.</p>		

Appendix 1



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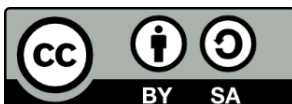
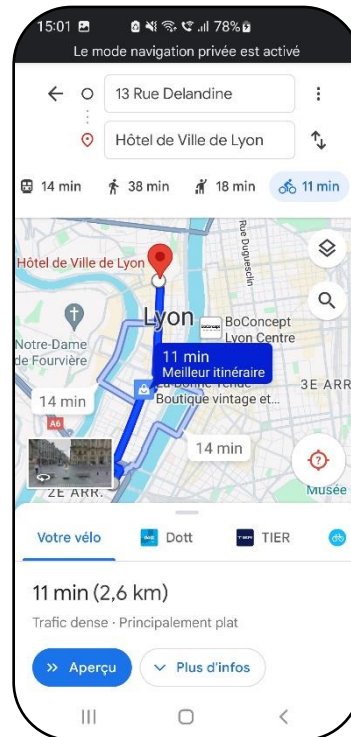
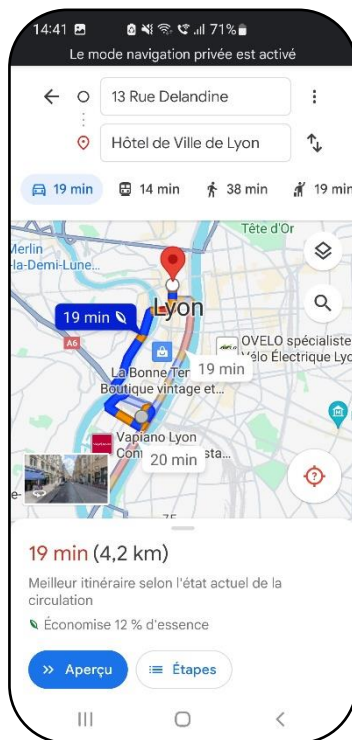
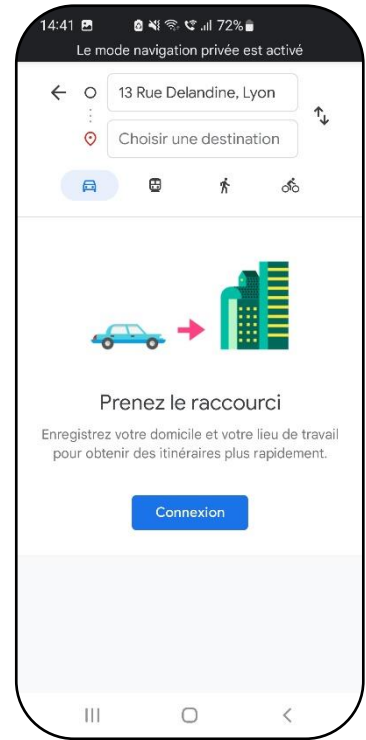
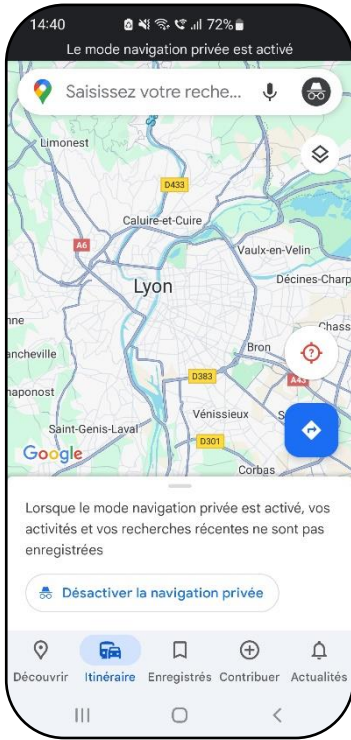


Appendix 2



Appendix 3

Screenshots from Google Maps application, you can of course choose another if you wish.



This material was produced in the Erasmusplus project **Numeracy in Practice**, projectnumber 2021-1-NL01-KA220-ADU-000 026 292. In this project, 11 partners in 11 countries worked together in designing, evaluating and improving the materials. All materials can be found on the website (www.cenf.eu).



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