







Name: _____ Class: _____ Date: _____

Energy comparison of means of transportation

Various means of transportation are scored differently with respect to their energy consumption.

Assignments

- Fill in the following table; use the values for the high-speed train to estimate the other values. Enter your estimated values in the left column (E).
- Research the actual figures and enter them in the right column (R).
- Compare your estimated values with the researched figures and assess how good your estimates were.
- Sort the various means of transportation according to their CO₂ emissions and their energy consumption.
- What other factors determine how environmentally friendly a means of transportation is?

Means of transportation	Maximum speed [km/h]		CO ₂ emissions per kilometer [g]		Number of seats		Energy consumption per kilometer [Wh]	
	E	R	E	R	E	R	E	R
 Car								
 Bus or commuter train in local public transportation								
 High-speed train*	320		13,500		460		25,000	
 Tour bus								
 Airplane (short haul)								
 Airplane (long haul)								

* Source: Siemens Fact Sheet "Velaro D – New ICE 3 (Series 407)"