Tutorial 6 - TA handout

February 7, 2024   8:58 AM

All the students need to know is:
- Vehicle geometry/size: **4.5 m long X 1.7 m wide X 1.4 m tall (show them the annotated picture of the car)**
  - They need this to determine the size (LxWxH) of the test specimen, after matching the Reynolds number
  - You should keep the annotated picture, but they can take a picture of it with their phone.
- "Typical operating speed": **50 km/h**
  - They need this to determine at which speed you'd like to predict the drag force, and to determine that drag force
- Vehicle frontal area: **2 m^2**
  - They need this to estimate the drag on the car given the drag coefficient

If the students ask about **fluid properties**, say: **"We are design engineers, we don't know anything about fluids"**
- Generally default to this answer, we'd like the students to develop critical thinking/finding fluid properties skills

If the students ask about **anything else related to the car**: search online for the matching specification for a **Toyota Corolla.**