

As you develop your model, consider the following questions

- Scale
 - What motion did we observe in the video and read descriptions of in the article? How does this motion connect to forces? What generates the forces? Can we observe this with the human eye? How can you represent this in your model?
 - Look at the zoom-in box for the rocket engine. What do you think each propellant (solid and liquid) looks like at the particle scale before and after the chemical reaction? How do you think this connects to the motion of the system? How can you represent this in your model?
- Systems
 - What are the initial conditions of the system for each phase? What are the inputs and outputs? How can you represent this in your model?
- Chemical Reactions, Energy, and Forces
 - Think about what you learned about energy and chemical reactions in middle school. How can we apply that understanding to the chemical reaction we observed in the launch video? How can you represent this in your model?
 - Think about what you learned about energy, forces, and motion in middle school. How can we apply that understanding to the motion we observed in the launch video? How can you represent this in your model?

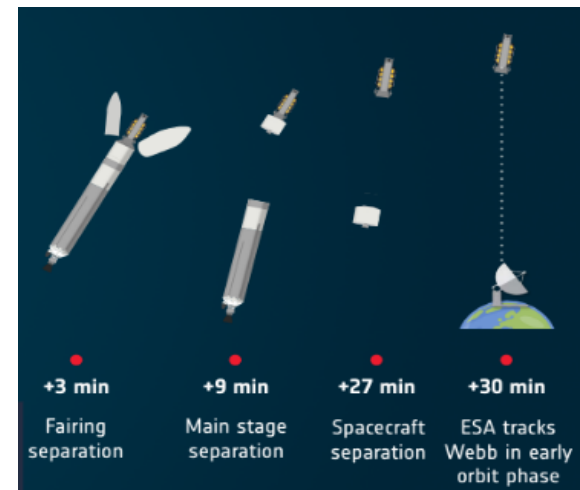
Phase 1
Ignition to Kármán Line

Macroscopic Scale



Phase 2
Kármán Line to Lagrange 2 (L2)

Macroscopic Scale



Zoomed in to Particle Scale

Zoomed in to Particle Scale