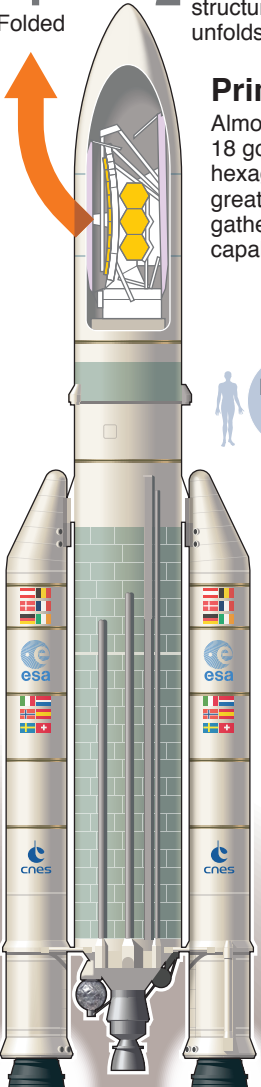
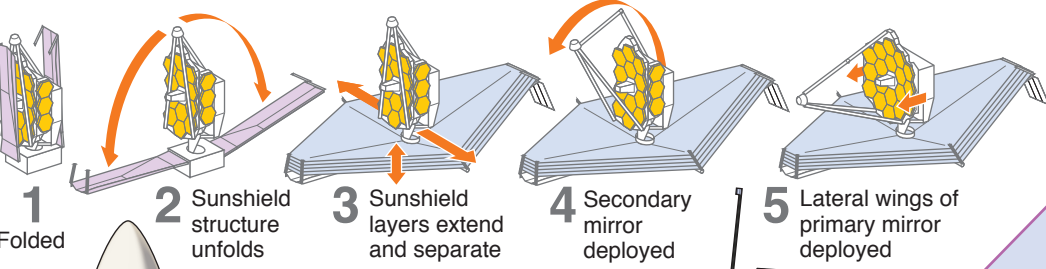


Folding / unfolding

Too big to fit inside any rocket, Webb will be folded up for launch, and unfolded gradually over its first month in space



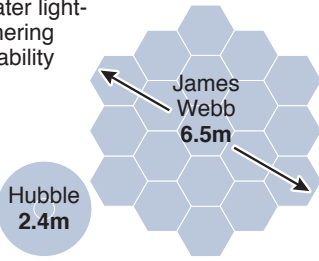
Ariane 5 will launch from Europe's Kourou spaceport in French Guiana

James Webb Space Telescope

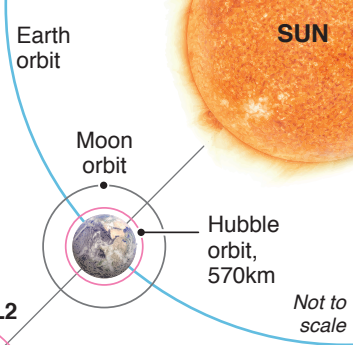
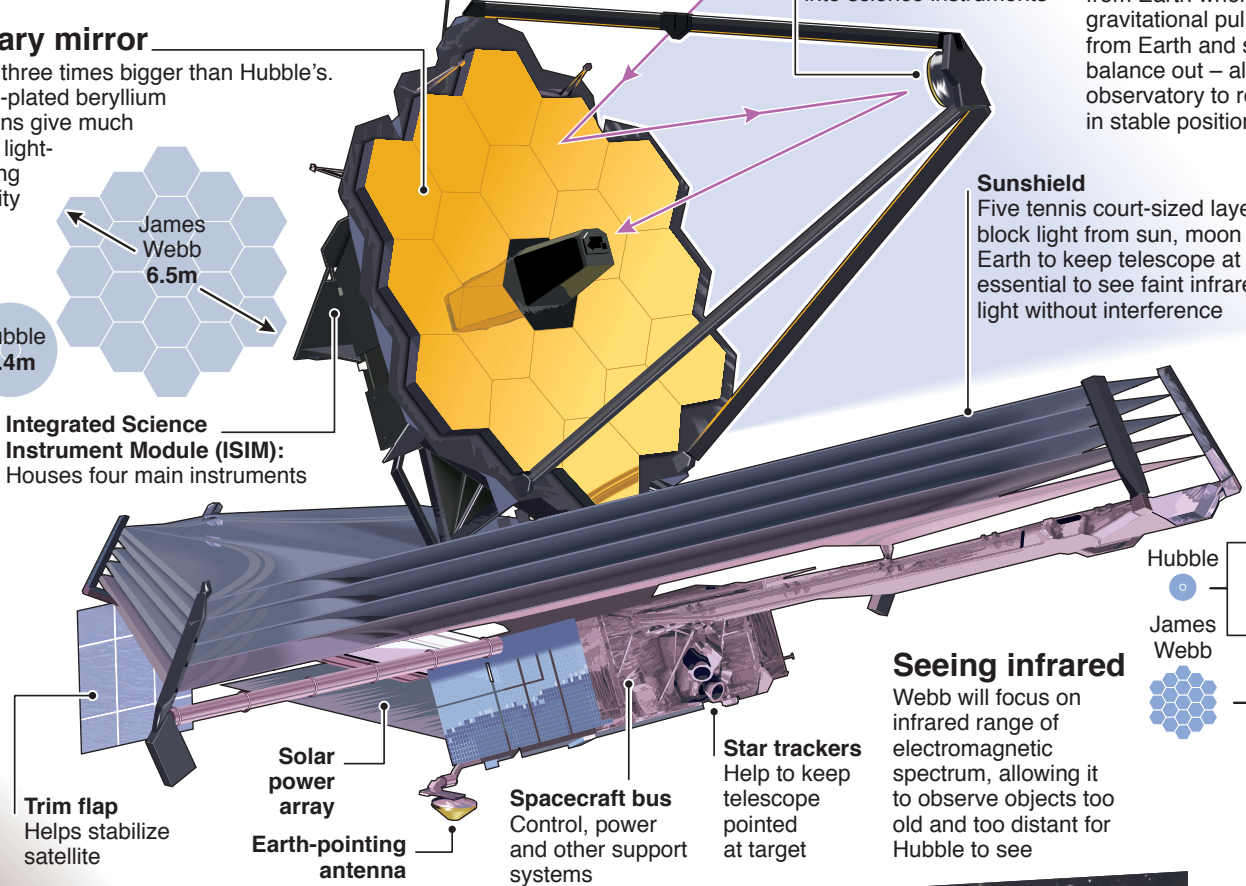
Conceived more than 30 years ago as the successor to the Hubble Space Telescope, Webb is the largest and most powerful observatory ever built. Once in orbit, it will allow astronomers to peer into the farthest reaches of the universe

Primary mirror

Almost three times bigger than Hubble's. 18 gold-plated beryllium hexagons give much greater light-gathering capability



Integrated Science Instrument Module (ISIM):
Houses four main instruments



Secondary mirror: Reflects light from primary mirror into science instruments

Sunshield
Five tennis court-sized layers block light from sun, moon and Earth to keep telescope at -223C, essential to see faint infrared light without interference

Seeing infrared

Webb will focus on infrared range of electromagnetic spectrum, allowing it to observe objects too old and too distant for Hubble to see

