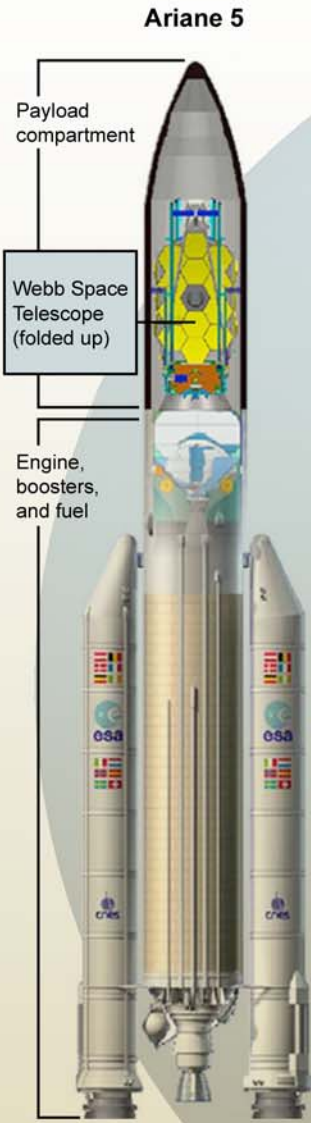


# James Webb Space Telescope

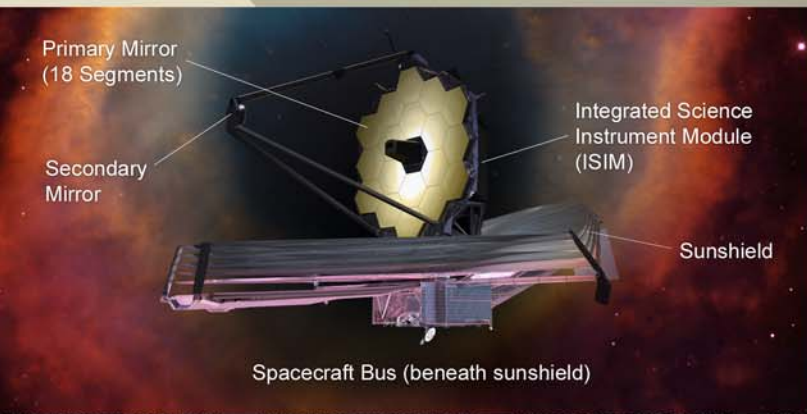
## Fun Facts Q&A Folding Puzzler



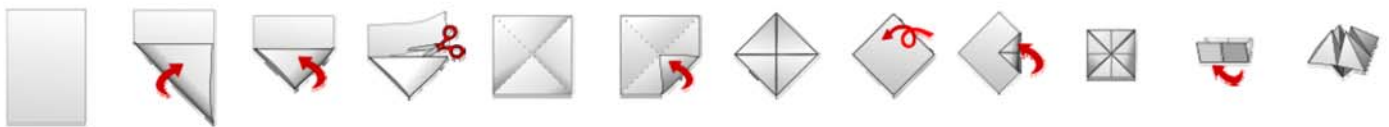
**A** million miles from Earth, the James Webb Space Telescope will soar through a frigid void, peering back to the time when new stars and developing galaxies first began to illuminate the universe. Scanning the universe for the invisible radiation called infrared, Webb will have to be larger than any space telescope ever placed in orbit, and function at temperatures just tens of degrees above absolute zero - the temperature at which even atoms are frozen into immobility.

With its infrared vision, Webb will be able to see light from the early universe that has been stretched as it travels across the expanding fabric of space. It will be able to see through clouds of dust to the warm, infrared-emitting objects hidden within. Our view of the universe will expand as Webb opens up previously unexplored territory to our gaze.

French Guiana Launch Point



- 1) Following the illustration below, fold the corners to meet the opposite sides of the paper, and use scissors to cut off the instruction sheet, creating a square sheet with diagonal creases.
- 2) Fold the four corners of the square into the center, forming the shape shown. Turn over the resulting smaller square, and fold the four corners in a second time.
- 3) Fold all four corners so that the points meet in the middle, and then work fingers into the pockets of paper in each of the four corners.





RED

2

JWST will be the biggest and most complex space telescope ever built

5

JWST's sunshield is composed of five layers and is the size of a tennis court



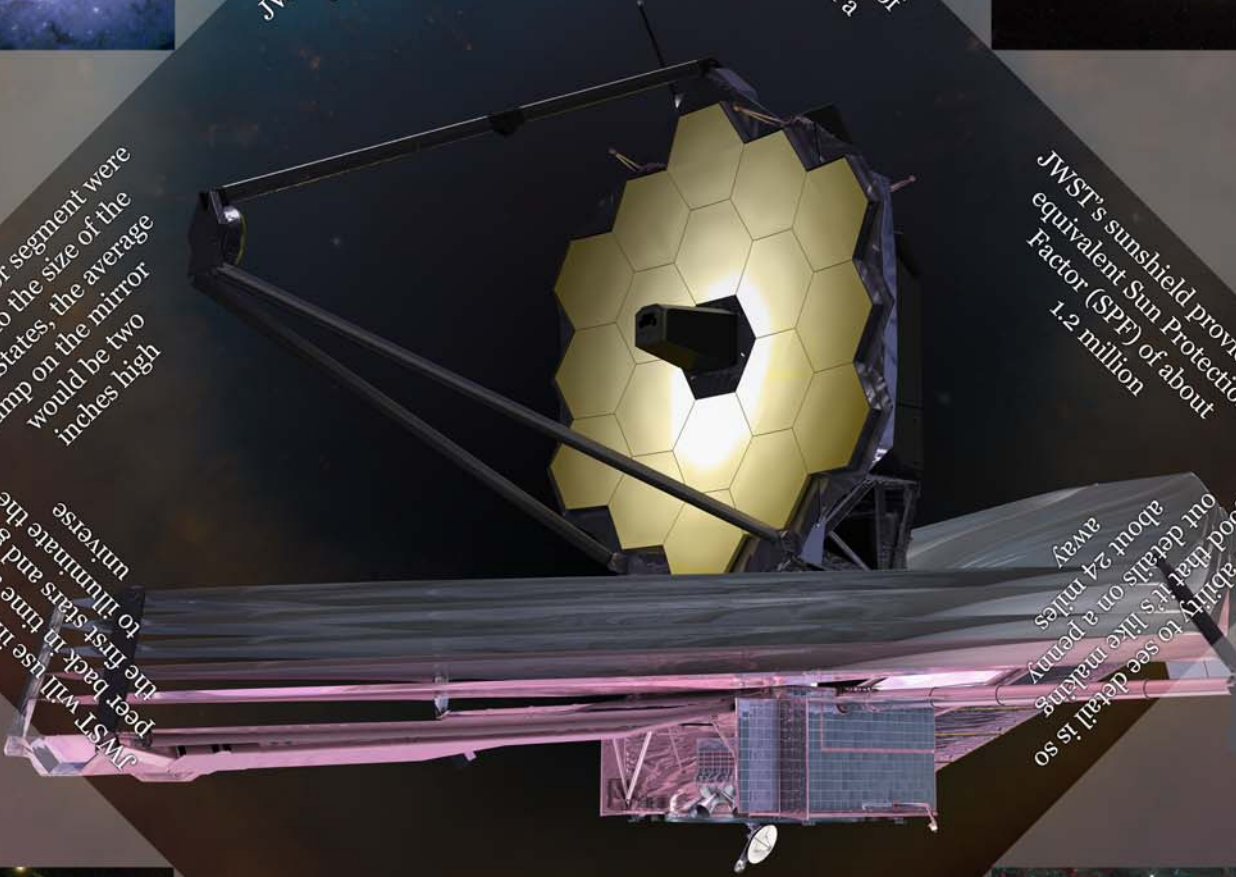
YELLOW

6

If a JWST mirror segment were scaled up to the size of the United States, the average bump on the mirror would be two inches high

1

JWST's sunshield provides an equivalent Sun Protection Factor (SPF) of about 1.2 million



3

JWST will use infrared vision to peer back in time and observe the first stars and galaxies to illuminate the universe

4

JWST's ability to see detail is so good that it's like making out details on a penny about 24 miles away



GREEN

8

JWST, traveling at the speed of light, will take about 11 seconds to make the roundtrip from Earth

7

JWST's orbit is nearly one million miles from Earth



VIOLET

