



# NASA's

## JAMES WEBB SPACE TELESCOPE

# FLIPBOOK

### Make Your Own Deployment Flipbook!

The James Webb Space Telescope will be the premier observatory of the next decade, serving thousands of astronomers worldwide. Webb will be a large infrared telescope with a 6.5-meter primary mirror and will be launched on an Ariane 5 rocket from French Guiana. Webb's revolutionary technology will enable new exploration of our solar system to the most distant galaxies in the universe, and everything in between. Webb will seek light from the first generation of galaxies that formed after the Big Bang and examine other worlds.

For the telescope to fit into a rocket, it must be folded up. After launch, Webb will deploy during its roughly 30-day, million-mile journey out to the second Lagrange point (L2). This flipbook highlights how Webb deploys or unfolds like a transformer once in space.

Webb is an international program led by NASA with its partners, ESA (European Space Agency) and the Canadian Space Agency.

#### ESSENTIAL QUESTIONS:

- What parts of the telescope move in the flipbook?
- How does the telescope deploy?
- Why was the Webb designed to fold and deploy?

#### MATERIALS NEEDED:



Binder clip



Scissors



Cardstock Paper

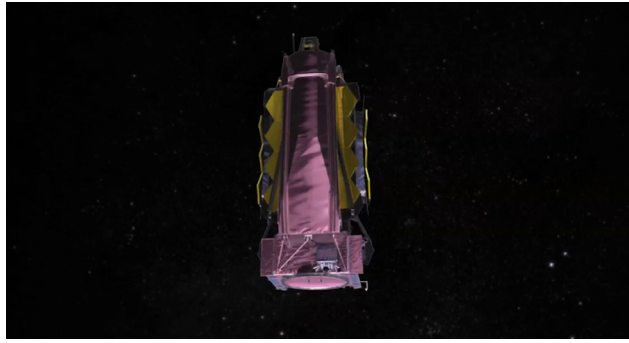
### INSTRUCTIONS

- 1** PRINT flipbook on cardstock.
- 2** CUT cardstock along the dotted line, making 48 frames.
- 3** STACK the 48 frames in order. The frames are numbered.
- 4** CLIP the stack of frames together, with the binder clip.
- 5** FLIP through the stack quickly. Watch and enjoy the animation.

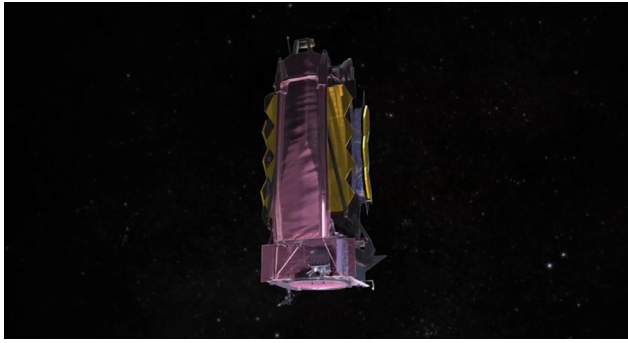


<https://nasa.gov/webb>

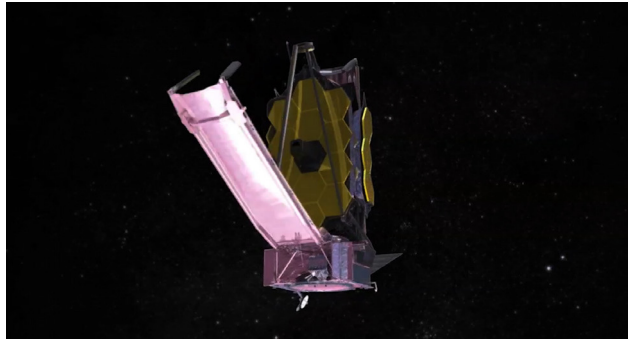
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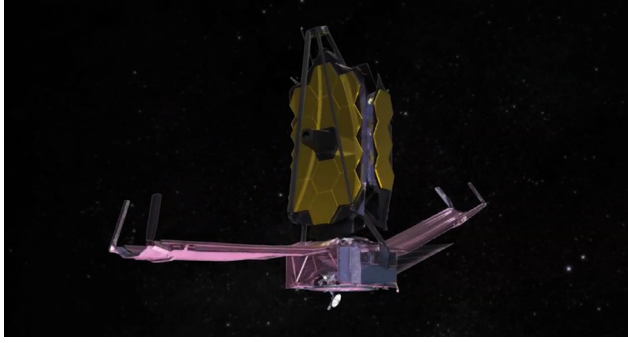
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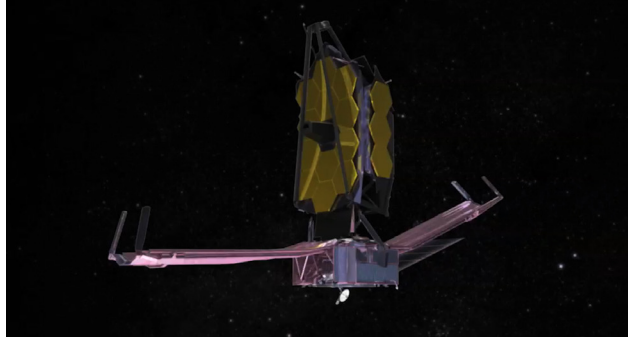
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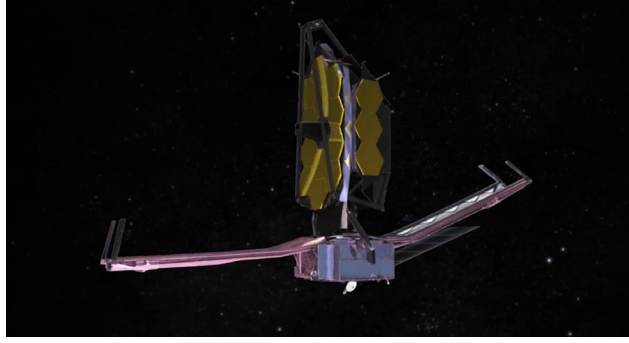
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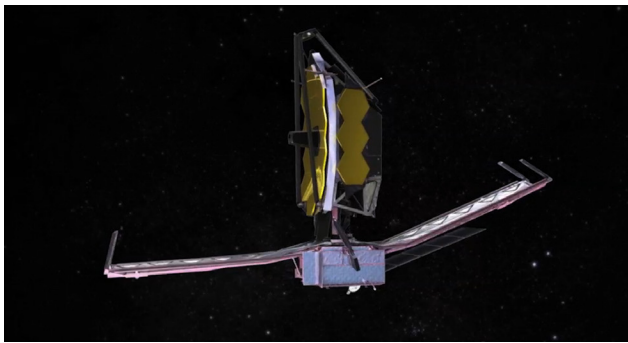
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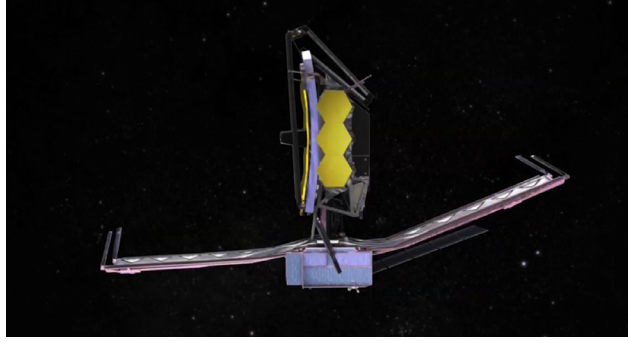
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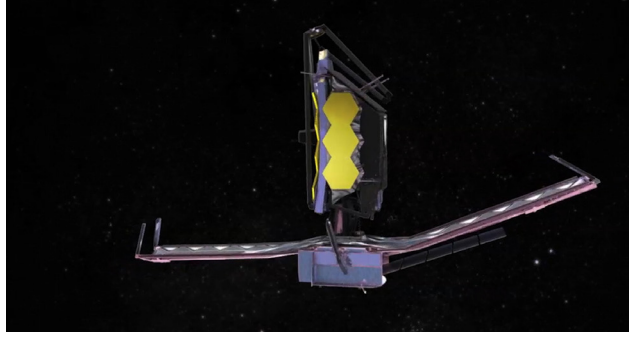
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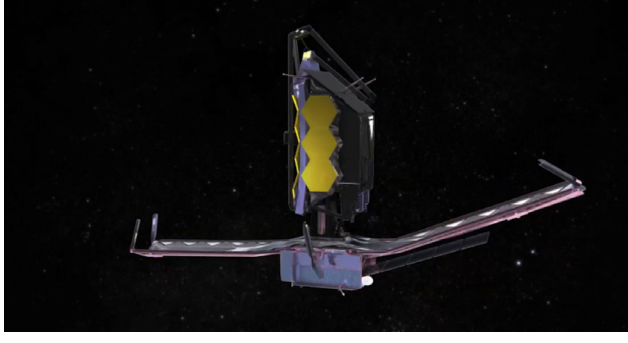
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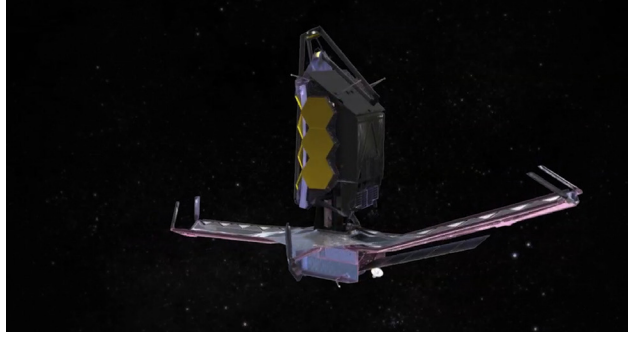
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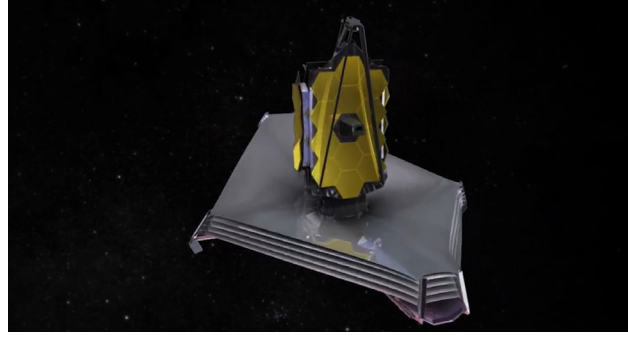
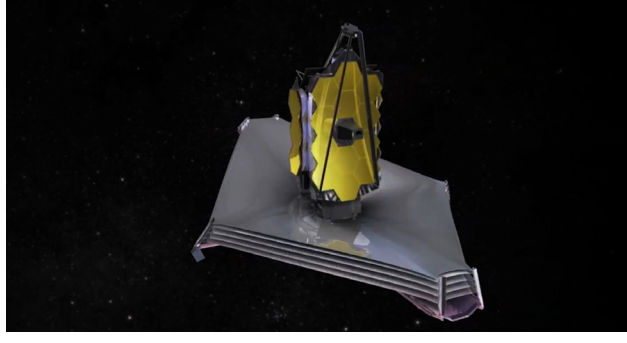
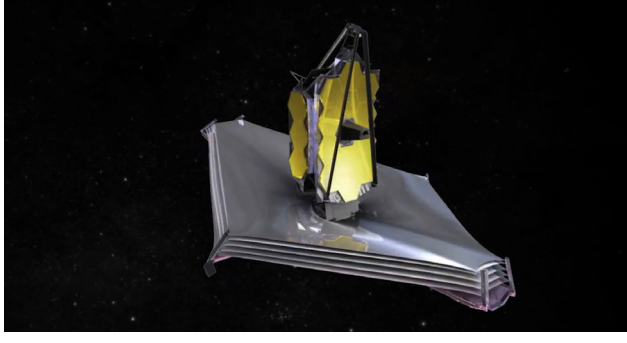
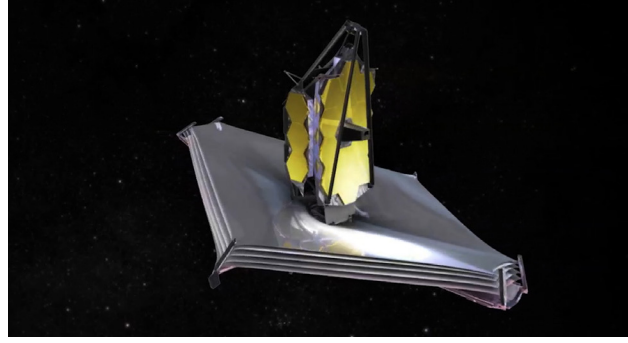
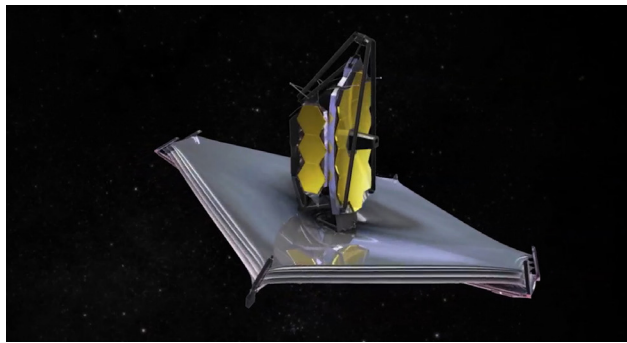
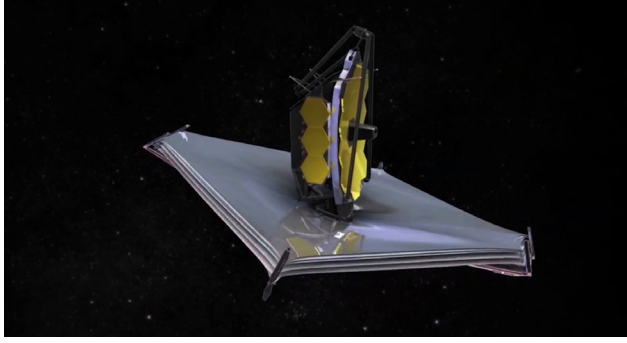
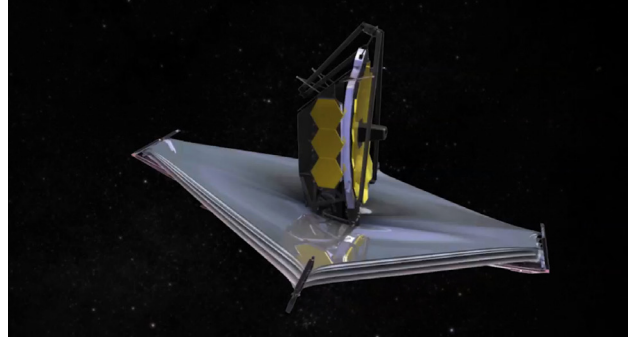
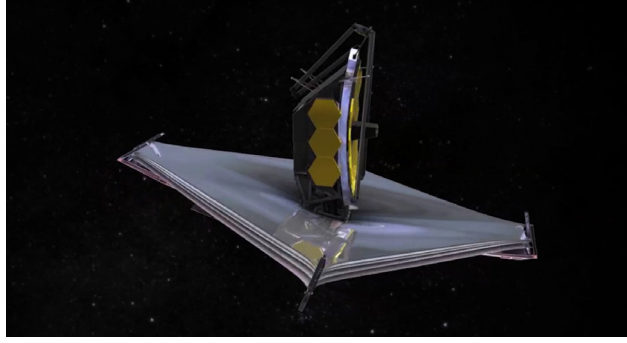
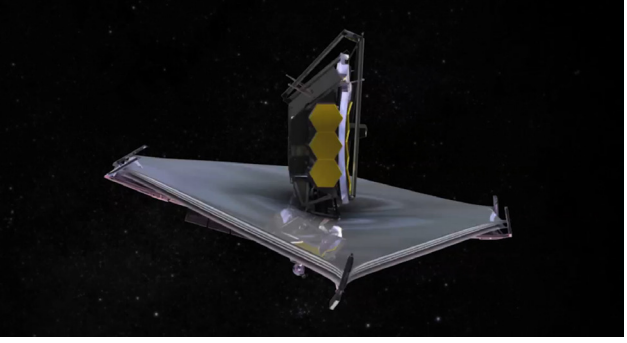
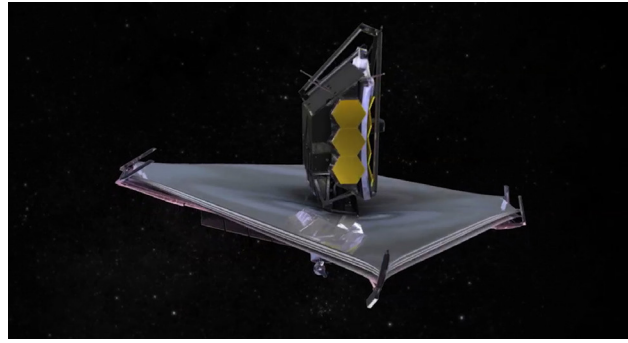
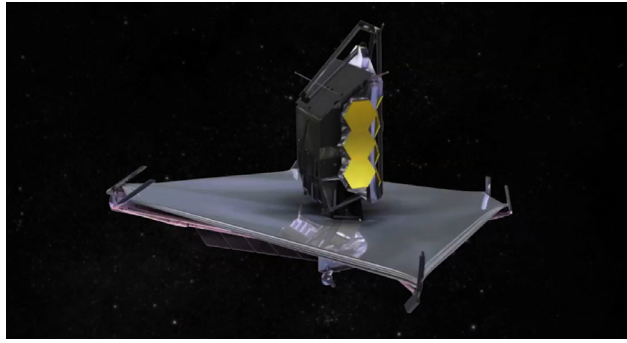
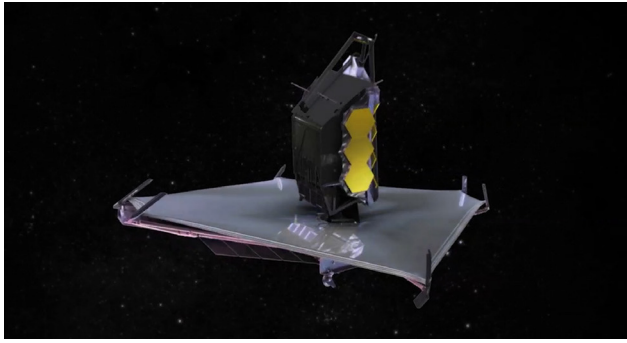
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