

The background is a dark space filled with white dots of varying sizes representing stars. On the left, a large, faint, stylized hand is depicted, with its index finger pointing towards the right. In the upper left, there is a stylized eye-like shape. In the lower center, a red circle highlights a small spiral galaxy icon, from which a red arrow curves upwards and to the right, pointing towards the text box. Other faint spiral galaxy icons are visible in the background.

MESSIER 81

M81 is an example of a spiral galaxy. When viewed in infrared, we can see star-forming regions. We can also see the spiral arm structure more clearly, revealing areas of dust and gas that are ready to become new stars.

The background is a black space filled with white dots of varying sizes representing stars. In the upper left, there is a stylized white eye-like shape. In the center, a white ring (the dust ring of the Sombrero Galaxy) is highlighted with a red circle. A red arrow points from this circle down towards the bottom right. To the right of the arrow, there are several white spiral shapes representing other galaxies. In the bottom right corner, there is a logo for the James Webb Space Telescope and the text 'DEEP SPACE DIARY' in yellow.

SOMBRERO GALAXY

The galaxy has a distinct ring of dust that circles a bulge of stars. When viewed in infrared, we can clearly see its dust and inner flat disk. Because we view this galaxy from its side, it appears very flat. Our Milky Way would look like this if it was view from the side too.



MAFFEI 2

This barred starburst galaxy is very difficult for us to see without infrared because thick clouds in our galaxy obscure it. With infrared we can see the shape of Maffei 2.

L1014

This dark cloud hides a secret that we can only see in infrared: a protostar – or baby star! With infrared technology, we can see a disk of gas surrounding the protostar. This feeds it and provides material for building planets.





NGC 253

When we view this galaxy with just visible light, its shape is difficult to determine because of our viewing angle, its dark dust clouds and the light from its massive stars. Infrared reveals the long spiral arms and the central bar, showing that NGC 253 is a barred galaxy.



PILLARS OF CREATION

Part of a young cluster of stars in the Eagle Nebula, the Pillars of Creation are composed of gas and dust, which prevents us from discovering what's within them with visible light. With infrared light however, we're able to see a multitude of stars which are otherwise hidden.

A SURPRISE, DISTANT GALAXY

Because Webb's mirror is so huge, it can catch light from galaxies that are so distant, we otherwise wouldn't know they're there. What would you name a galaxy if you were to discover one?

