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.

James Webb Space Telescope

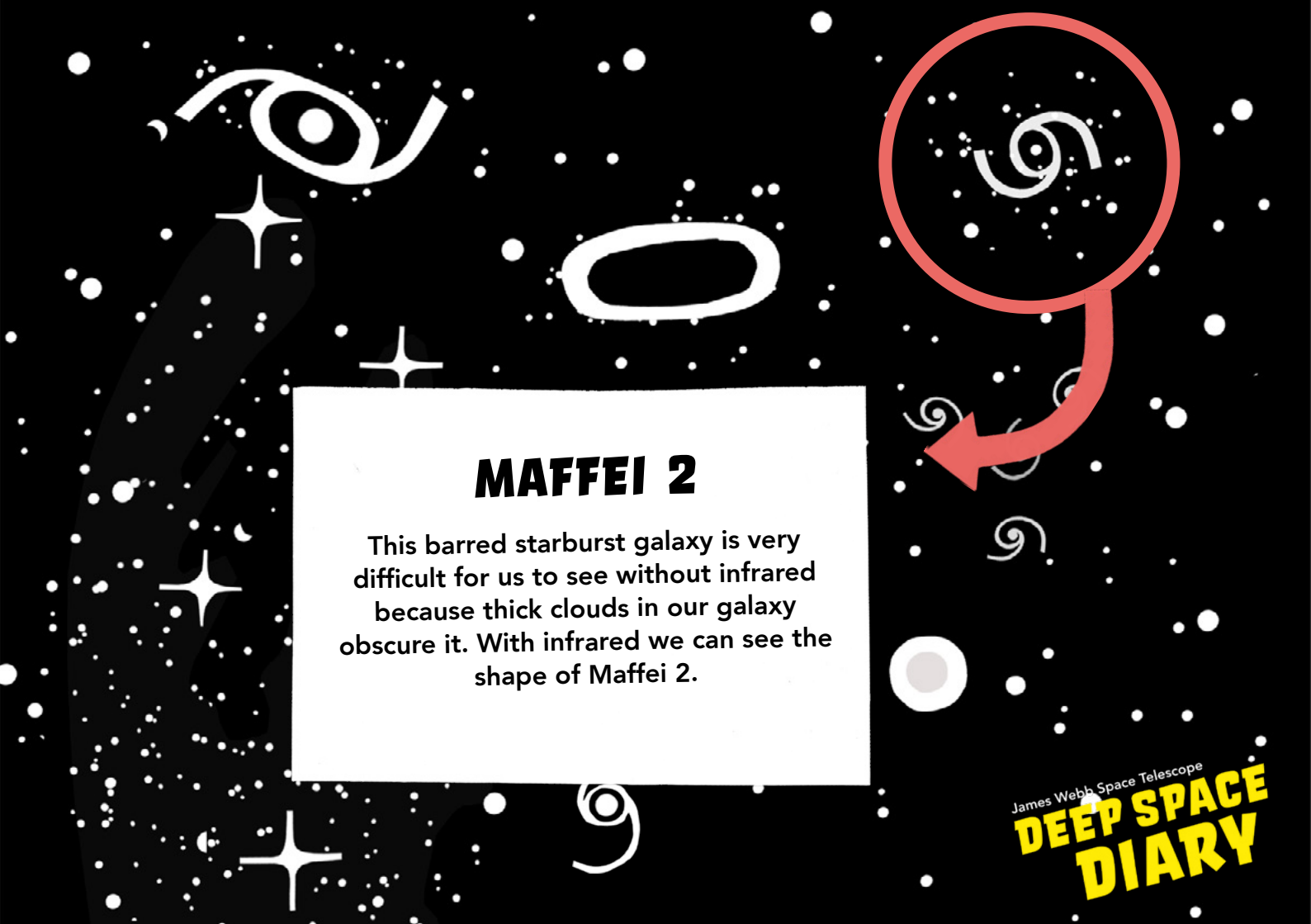
DEEP SPACE DIARY

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.

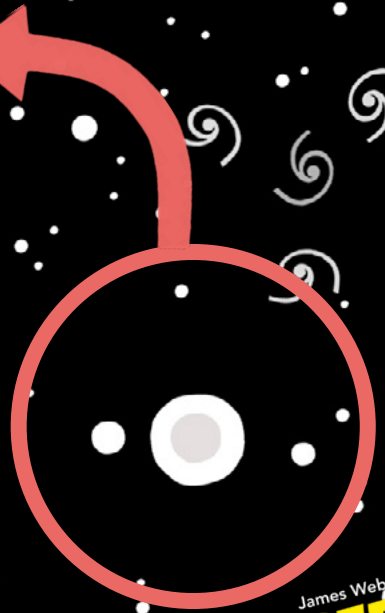
James Webb Space Telescope

DEEP SPACE DIARY


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.
James Webb Space Telescope
DEEP SPACE DIARY

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.



James Webb Space Telescope

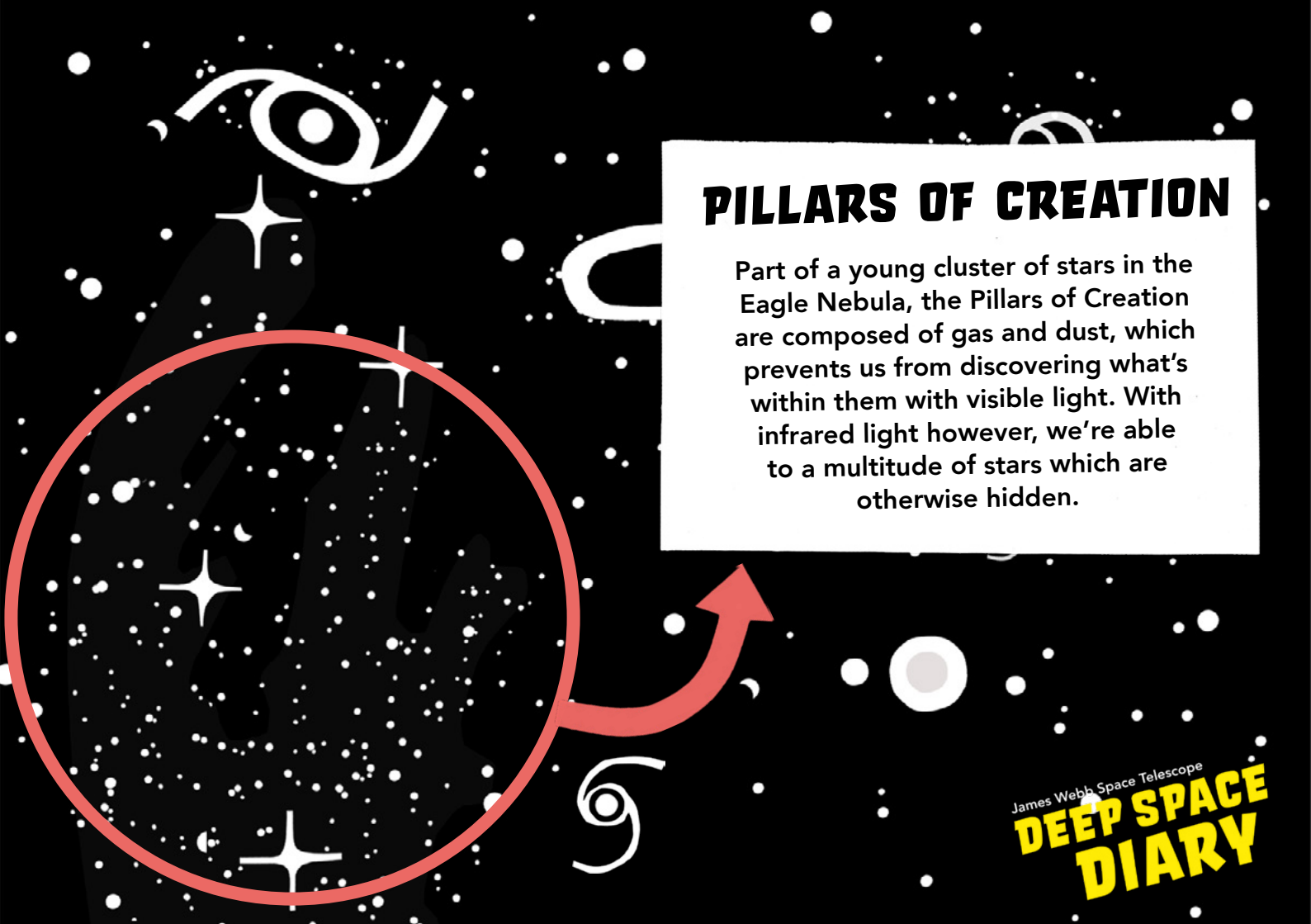
DEEP SPACE DIARY

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.

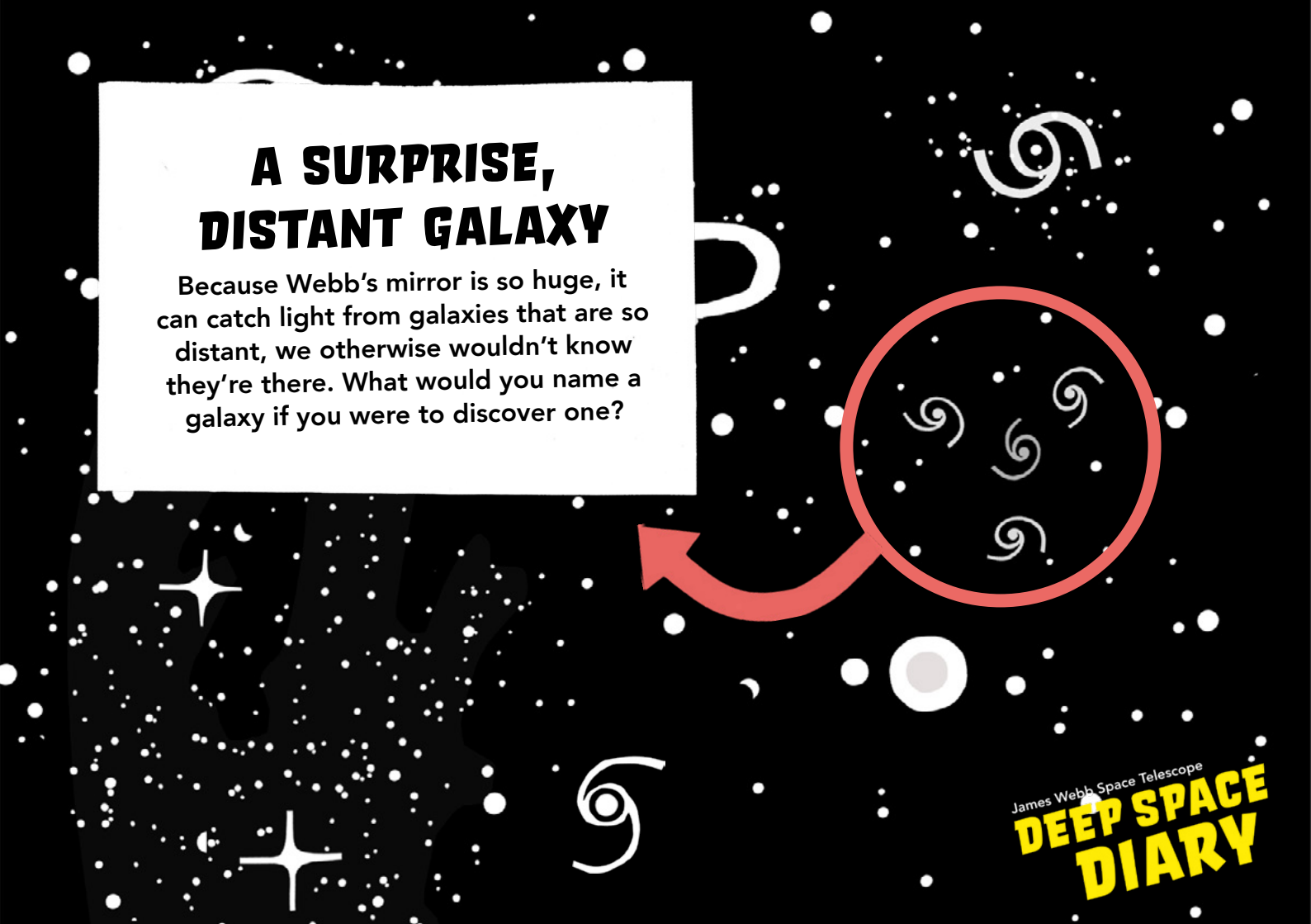
James Webb Space Telescope

DEEP SPACE DIARY


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 a multitude of stars which are otherwise hidden.
James Webb Space Telescope
DEEP SPACE DIARY

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?



James Webb Space Telescope

DEEP SPACE DIARY