

Name: _____

Period: _____ Date: _____

James Webb Telescope – Scope It Out!
Astronomy



Directions: Head to the link below and answer the questions as you work your way through the tutorial.
https://jwst.nasa.gov/game_small.html

Level Zero

1. Define reflector:
2. Define refractor:
3. Who invented/is credited with the refracting telescope?
4. What date did the discovery occur?
5. Draw a diagram to show how the light travels as it enters the top of the telescope until the light is seen by the observer.
6. Who invented/is credited with designing the first reflecting telescope?
7. What date did the discovery occur?

Level One:

1. Match the seven components on the Newtonian telescope with the corresponding component of the James Webb Space Telescope. Be sure to fill out all of the necessary information below.

Newtonian Description	Newtonian Part (drawn)	James Webb Description	James Webb Part (drawn)
1.			
2.			
3.			
4.			

5.			
6.			
7.			

Level Two / Three:

1. Draw a diagram of the Hubble Space Telescope and draw lines to a diagram of the corresponding components on the James Webb Space Telescope.

Level Four:

1. What is the function of the James Webb Space Telescope's sunshield?
2. How do the diameters of the mirrors compare for the Hubble Space Telescope and the James Webb Space Telescope?
3. How many hexagonal segments does the James Webb Space Telescope have?
4. What is the ISIM?
5. What is the ISIM's function?