

What I Have Learned

To check your understanding of the lesson, complete the sentences below. Choose your answer inside the box.

space-time	accelerating	star
gravity	escape velocity	sun
43	black holes	lensing
Mercury	mass	

1. General relativity deals with _____ frames of reference.
2. General relativity considers _____ as a product of warping of space-time.
3. _____ is a four-dimensional space composed of a three dimension of space and one dimension of time.
4. The _____ of a cosmic body is proportional to the distortion it can create in space-time.
5. General relativity like the special relativity has consequences such as: Mercury's perihelion shift; gravitational lensing of light and the existence of _____.
6. Mercury, as the nearest planet to the _____ is greatly affected by the sun's warping of space-time.
7. About 43 *arcsec per century* discrepancy in the perihelion shift of _____ was calculated using the general relativity. This value is equivalent to the difference in the observed procession in the 19th century and the precession calculated using Newtonian gravitation.
8. Gravitational _____ happens when light emitted by distant stars or galaxies bends due to the curvature of space-time created by a massive object in the universe.
9. A black hole is an extremely dense collapsed _____. Not even light can escape its gravitational field.
10. _____ is the speed an object must attain to escape a massive body.

LIVEWORKSHEETS