

SS Physics I “Vocabulary to Know”

Gravitational Waves

No.		Name	
-----	--	------	--

1 Fill in the blanks with the most appropriate word. The first letter of the answer is already given.

(18 items – 1 point each)

- The 2017 Nobel Prize in Physics was a_____ to three Americans for the first observation of g_____ waves.
- Gravitational waves are r_____ in the fabric of space and time.
- The existence of gravitational waves was p_____ by Albert E_____ almost a century ago in his general theory of r_____.
- Space is b_____ or d_____ by things that have mass.
- When masses a_____, gravitational waves are produced.
- We can d_____ gravitational waves made by really massive objects moving very very fast.
- Using LIGO or Laser I_____ Gravitational-Wave Observatory, they succeeded in their detection of garavitatational waves produced by the c_____ of two massive black h_____.
- LIGO has 4-km-long t_____ and uses I_____ to measure the changes in the distance between the ends of the tunnels.
- They had to measure very p_____ whether the space in between has s_____ or c_____.

2 Why is detecting gravitational waves so significant?

(2 points)