

Active and Passive Voice

Worksheet A Name: _____

In the **active voice**, the subject performs the action expressed by the verb.

Example: The dog bit the tail.

The subject of the sentence is "dog," and because he is the one who bit(the tail), this is a sentence in the active voice.

In the **passive voice**, the action is performed upon, instead of by, the subject.

Example: The tail was bitten by the dog.

In this sentence, the subject is "tail," but the tail is not doing the biting; instead the tail is the thing that is bitten. The subject is not doing an action, but receiving the action, so this sentence is in the passive voice.

Directions: On the line, write the letter A if the underlined verb or verb phrase is in the active voice, and P if it is in the passive voice.

- _____ P. 1. Black holes can be caused by the collapse of a massive star.
- _____ A. 2. A star tears those bigger than the sun into billions of pieces the size of a large city.
- _____ A. 3. Princeton physicist John Wheeler coined the term "black hole" in 1967.
- _____ A. 4. The powerful gravitational pull of a black hole prevents even light from escaping.
- _____ B. 5. The black appearance of black holes is caused by the absorption of all light.
- _____ B. 6. Black holes often lie at the center of most galaxies.
- _____ A. 7. Supermassive black holes are located at the center of most galaxies.
- _____ B. 8. The center of a black hole is called a singularity.
- _____ B. 9. Matter accrues infinitely dense at the singularity.
- _____ B. 10. Black holes have a point of no return boundary called the "event horizon."
- _____ B. 11. No object can escape once it reaches the event horizon.
- _____ B. 12. Freezing things happen when an object passes the point of no return.
- _____ B. 13. An outside observer will think the object is slowing infinitely close because of an effect called gravitational time dilation.
- _____ B. 14. The observer will never actually see the object disappear into the black hole.
- _____ B. 15. Gravitational redshift will cause the object to appear redder and dimmer.
- _____ B. 16. The object will be torn apart by tidal forces.
- _____ B. 17. These tidal forces cause a process called "spaghettification" or "the noodle effect."
- _____ B. 18. If, for example, a car is into a black hole from Jupiter but, the tidal forces would pull the front bumper away so much faster than the back bumper that the car would stretch out to the breaking point.
- _____ B. 19. This force would stretch the car out if it is pulled to a string of atoms, like a long spaghetti noodle.
- _____ B. 20. The "noodle" of atoms will eventually be pulled into the singularity.