

Protocol: Sound

Problem : During the movie « Gravity » with Sandra Bullock you can't hear large explosions in space. Scientists says this isn't correct. Why isn't it ?

Hypothesis : We can't hear the sounds in space because there is not oxygen.

Experiment :

Material : -Vacuum Pump
- a Bell
-Timer
-Barometer
-sonometer

First, we put the timer, the barometer and the sonometer in the bell.
Second, we evacuate the oxygen of the bell by means of vacuum pump.
Then, we can see by the barometer if there is presence of atmospheric pressure and by the sonometer if there is any sound.
Finally, when the timer rings, if the barometer indicates zero, it confirms that there is not air anymore. And if the sonometer indicates zero too, it confirms that there is not sound in the bell.

The results : When the timer rang, any sound went out.

Conclusion : In space, there is any oxygen so it is therefore that in the film, we can't hear large explosions.