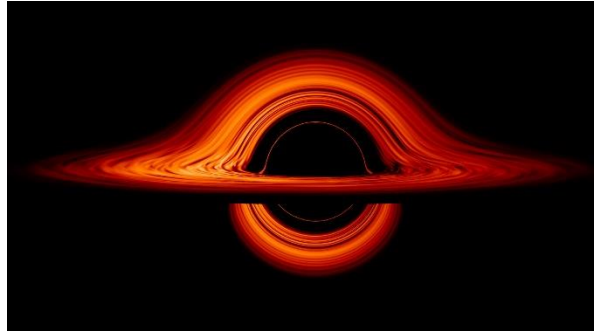


The Mysteries of Black holes

Grades 3-8

Black holes are mysterious objects in outer space that have a really strong gravitational pull. Small black holes are scattered throughout our Milky Way, and supermassive black holes exist at the center of most galaxies in the Universe. What exactly are black holes? How are they formed? And what would happen if you fell into one? Join us to find out!



Post lesson discussion questions

- 1) Explain what a black hole is? Why is it black? Is it actually a hole in space?
- 2) Where do black holes exist? Are there any black holes in our solar system? Our galaxy?
- 3) What are the different types of black holes and how are they formed?
- 4) Could you travel to a black hole? What would happen if you fell in?
- 5) Will the Earth ever be “sucked” into a black hole?

Post lesson activities

- Black hole activity guide (simple math, crosswords, definition matching)- <https://imagine.gsfc.nasa.gov/educators/blackholes/starchild/starchild.pdf>
- Create your own gravity well- <https://nightsky.jpl.nasa.gov/docs/BHNoEscape.pdf>
- A similar activity to the gravity well that includes learning goals- <https://astroedu.iau.org/en/activities/1749/what-is-a-black-hole-lower-secondary-level/>
- Black hole board game (may be a little outdated, but still fun)- <https://spaceplace.nasa.gov/black-hole-boardgame/en/>

Other Resources

NASA Space Place black hole for kids info: <https://spaceplace.nasa.gov/black-holes/en/>

Black hole educator guide, and a whole set of galaxy and black hole-related resources: <https://www.nustar.caltech.edu/page/teachers>