# **Scratch logo and symbol, meaning, history, PNGAsteroids 6: Zapping asteroids**

*When the asteroids (rocks) receive a “zap” message, they should check to see if they’ve been hit.*

* Graphical user interface

  Description automatically generatedClick on the rock sprite and select the code tab.
* Add a code block to receive the “zap” message. This tells the rock to check if it is being touched by a ship/torpedo.
* The simplest way to blow up a rock is to **hide** it.
* Graphical user interface, text, application, chat or text message

  Description automatically generatedWe need the asteroid to re-appear when we start a new game (green flag). Add **show** to the beginning of the existing startup code.
* Test to see if the asteroid disappears when you hit it with a torpedo.

*The game is over a bit quick, so let’s make it more interesting. In classic Asteroids the rocks break in half and speed up. Let’s add more costumes.*

* Shape

  Description automatically generatedOpen the rock costumes tab and choose two more costumes to upload from asteroids.zip: **rock2.png** and **rock3.png**.
* Make both graphics less square using the eraser tool.

*We will have three sizes of rock 30%, 20% and 10% of the actual size of the graphic. Each time we hit it we can make it smaller.*

* Create a variable for the asteroid size. Each one has a different size so create a variable **for this sprite only**. The “**for this sprite only”** part is *really important* because you can’t change it later.  
  Variables > Make a Variable > **For this sprite only** > called **size**
* Graphical user interface, text, application

  Description automatically generatedIn the rock startup code, set this size variable to 30, and set the sprite size to the size variable.
* Now when the asteroid is hit we can shrink the size by -10.
* Timeline

  Description automatically generatedWe only hide it when the size drops below 10%
* At the same time we can send it off in a random direction.

*Each time we hit the asteroid it gets smaller and harder to hit next time.*