# **Scratch logo and symbol, meaning, history, PNGAsteroids 4: photon torpedoes**

*We want to shoot the rocks to break them up. We will create torpedoes by* ***cloning*** *the spaceship. Clones ‘inherit’ the properties of their parent, so they start off in the same position, pointing in the same direction. This is exactly what we need to launch a torpedo.*

* Open the costumes tab for the ship, and add a new costume using **Paint**.
* We need to change the fill colour to white. Click on the down-arrow next to **Fill**. On the panel that opens, set the **Saturation** to zero. Click away from the panel to close it.
* Select the paint brush tool. Make the brush size slightly larger (e.g. 20), and make a single white dot in the centre of the sprite. This is the *photo torpedo*.
* Name this costume, ‘torpedo’.
* We need to make sure the ship starts life as a ship (not a torpedo) so when the code runs it should select the ship costume.

Graphical user interface, text, application, chat or text message

Description automatically generated

* Graphical user interface, application

  Description automatically generatedDecide which button you want to use as the torpedo trigger (I’ve used the down-arrow). When we press the trigger, it clones itself.
* The clone must change costume to the torpedo.
* Add a forever loop to the keep the torpedo in motion.
* Within the loop, move the torpedo (10 steps).
* Graphical user interface, application, chat or text message

  Description automatically generatedWe don’t want the torpedo to carry on forever, we want it to disappear at the edges. Add a condition to test if the torpedo is **touching** an **edge**.
* When it reaches an edge we need to **delete the clone**.
* Try firing a few torpedoes.