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

*Shoot at 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.*

1. Open the costumes tab for the ship, and add a new costume using **Paint**.
2. 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.
3. 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*.
4. Name this costume, ‘torpedo’.
5. Graphical user interface, text, application, chat or text message

   Description automatically generatedMake sure the ship starts life as a ship (not a torpedo) so when the code runs it should select the ship costume.
6. Graphical user interface, application, chat or text message

   Description automatically generatedGraphical user interface, application

   Description automatically generatedDecide which button to use as the torpedo trigger (I’ve used the down-arrow). When you press the trigger, it clones itself.
7. The clone must change costume to the torpedo.
8. Add a forever loop to the keep the torpedo in motion.
9. Inside the loop, move the torpedo (10 steps).
10. The torpedo shouldn’t carry on forever, make it disappear at the edges. Add a condition to test if the torpedo is **touching** an **edge**.
11. When it reaches an edge **delete the clone**.

*Try firing a few torpedoes.*