

Suitable for primary to early secondary aged children

## Fruit Hoop Fishing Game

Every year, thousands of sharks are caught accidentally as bycatch, snagged in nets set out to catch other types of fish.

Fishing nets like purse seines and driftnets make it easy to catch lots of fish. But they've also introduced new problems: the nets catch everything that can't swim through the mesh, regardless of type of fish (species). When the nets are hauled in, fishers will always find some fish they didn't want to catch (the bycatch), sometimes these may be thrown back into the water, but most of these animals die anyway. Bycatch is thought to be one of the main reasons that shark numbers are declining around the world.

Sharks are particularly vulnerable to over-fishing as they are slow growing, late to mature, have long gestation periods (it takes a long time for eggs to hatch or babies to be born) and they produce few offspring compared to other fish.

This activity will allow you to explore two methods of fishing and determine how selective they are; that is how well they work to catch a target type of fish or species.

### What you will need:

- Multi-coloured fruit hoop cereal or large pony beads
- Large tub, bowl or shoebox
- Large paper clip
- Ladle or small fishing net
- Sugar paper
- Glue
- Timer



Bull Huss

### DO:

Discuss methods of fishing, see how many forms of fishing you can identify.

<https://britishseafishing.co.uk/commercial-fishing-methods/> has a list of commercial methods used in the UK.

Compare hook and line and net fishing to larger scale commercial types of fishing like trawl nets and long lining. For this activity you will be fisherfolk and try out these two fishing techniques.

Add fruit hoops or beads to a large bowl (tub or shoe box) so there is a layer a few cm deep. Bend a paper clip into a hook shape and have a small net or ladle handy.

### Round one:

Rules: catch as many fish as you can before the buzzer.

Everyone playing tries hook and line fishing for 1 minute (set a timer) using their paper clip hooks to catch hoops/beads.

Once the timer buzzes, count and record your catch (see table below).

Next, try net fishing by taking turns scooping with the net or ladle for one minute (total time). Once the timer buzzes count and record your catch.

Discuss the two methods used to catch fish (hoops/beads):

- Which method works best for fishers?
- Which method is better for fish populations?
- If you were a fisher, which method would you choose, net fishing or hook-and-line fishing?

### Round two:

Rules: catch as many RED (or other appropriate colour) fish as you can before the buzzer.

This time choose one colour 'fish' that you will be fishing for. Any other colour of fruit hoop or bead caught will be bycatch or incidental catch, as it's known in the fishing industry.

For one minute, use paper-clip hooks to catch as many "fish" (of the pre-decided colour) as you can. Count and record catch.

Next, use the net (or ladle) to scoop fish. Remember that you are trying to catch only one colour of fish, but that in the course of fishing operations there is normally some bycatch. Count and record catch.

Discuss the two methods used to catch fish:

- Which method works best for fishers?
- Which method is better for fish populations?
- If you were fishers trying to capture a specific type of fish, which method of fishing would you choose, net fishing or hook-and-line fishing?

### Follow-up

You can create a bar graph to show how many different types of fish (colours) were caught in the net. On a piece of sugar paper, line up the fruit rings or beads by colour and glue them to the paper.

Discuss what happens to fish that are bycatch (some are tossed back to sea and survive, and others die). Explain that sharks are common bycatch, and they usually don't survive. As a result, some shark populations have been severely depleted.

Encourage a discussion of how people can manage ocean resources

# Fruit Hoop Fishing Game

Name: \_\_\_\_\_

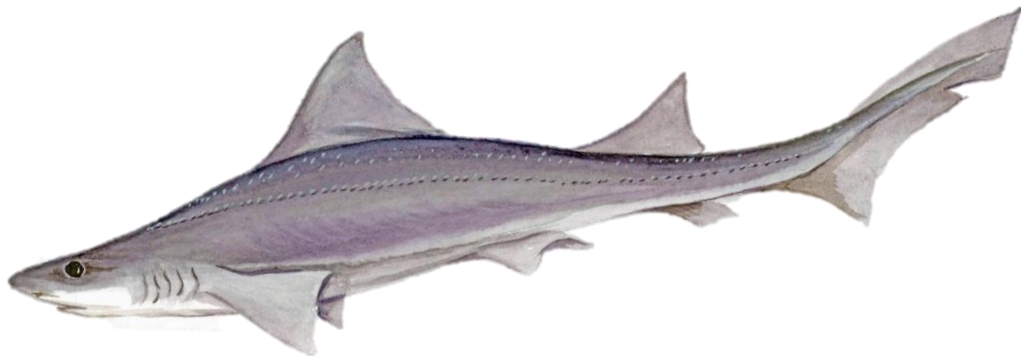


Bull Huss

Fishing type	Type of fish				
Round 1	Number of Blue fish	Number of Red fish	Number of Yellow fish	Number of Green fish	Total fish
Hook and line (for one min)					
Net (for one min)					
Round 2	Target fish is:				
Hook and line (for one min)					
Net (for one min)					

Bycatch total for hook and line fishing: \_\_\_\_\_

Bycatch total for net fishing: \_\_\_\_\_



Starry Smooth Hound