NEW PIRFO 3.6.03	**Correctly identify fish and marine species using established species identification process based on anatomical features**

Prerequisites:

Descriptor

This module requires candidates to use an established species identification process based on anatomical features to correctly identify fish and marine species.

Learning Outcome	Assessment Criteria
1. Identify the anatomical features of fish	1.1 Main anatomical features of fish species are correctly identified
2. Differentiate between Pacific tuna species using anatomical features	2.1 Adult Pacific tuna species are recognized by means of their identifying anatomical features 2.2 Juvenile yellowfin and bigeye tuna are identified by means of their anatomical features
3. Differentiate between Pacific billfish species using anatomical features	3.1 The common Pacific billfish species are recognized by means of their identifying anatomical features
4. Differentiate between Pacific shark species using anatomical features	4.1 The Pacific shark species encountered in longline and purse seine fisheries are recognized by means of their identifying anatomical features
5. Distinguish between common Pacific pelagic fish bycatch species using anatomical features	5.1 The fish bycatch species encountered in longline fisheries are recognized by means of their identifying anatomical features 5.2 The fish bycatch species encountered in purse seine fisheries are recognized by means of their identifying anatomical features
6. Use an identification guide to correctly identify a fish species	6.1 Demonstrate use of the species identification guides to correctly identify the fish species, common name, scientific name, and FAO Species Code

PIRFO 3 - 6.03 Evidence and Assessment Guide

Context and method of assessment

Assessment is to be conducted in a simulated workplace environment.
The following assessment methods are suggested:

- written or oral short answer testing
- practical exercises
- fish dissection exercises

Resources may include:

- Species identification guides photos for tuna, billfish, sharks and main bycatch species
- Basic fish biology texts
- Dissection kits
- FAO species guides

Underpinning knowledge

This module requires candidates to demonstrate general knowledge of fish biology and anatomy. Candidates must also show that they can reference specific anatomical features to species identification guides in order to successfully identify a fish species.

Learning Outcome	Evidence Guide
1. Identify the anatomical features of fish	The main external and internal anatomic features of fish are correctly identified through using photographs and practical dissection exercises on real fish.
2. Differentiate between Pacific tuna species using anatomical features	The distinguishing features of adult Pacific tuna species are correctly identified from pictures and photographs in oral or written assessment. The distinguishing features of juvenile yellowfin and bigeye tuna are correctly identified from pictures and photographs in oral or written assessment.
3. Differentiate between Pacific billfish species using anatomical features	The main distinguishing features of Pacific billfish species are correctly identified from pictures and photographs in oral or written assessment using a species identification guide.
4. Differentiate between Pacific shark species using anatomical features	The main distinguishing features of Pacific shark species encountered in longline and purse seine fisheries are correctly identified from pictures and photographs in oral or written assessment using a species identification guide.
5. Distinguish between common Pacific pelagic fish bycatch species using anatomical features	The main distinguishing features of fish bycatch species encountered in Pacific longline and purse seine fisheries are correctly identified from pictures and photographs in oral or written assessment using a species identification guide.
6. Use an identification guide to correctly identify a fish species	Species guides for fish identification are successfully used in practical and written exercises to correctly identify species, common name, scientific name, and FAO Species Code.

Practical skills

The essential skills a person needs to perform work to the required standard include:
Use of fish ID guides
Use of dissection tools

Literacy skills used for:
reading the ID guides and FAO codes
recording species identifications

Critical aspects of evidence

The purpose of this module is to ensure that fisheries observers are able to identify and distinguish between the main Pacific tuna species, in their adult and juvenile forms.
For billfish, sharks and other bycatch fish species, it is expected that observers would be able to note and record specific features of species in order that they can be subsequently identified from species guides.
An ability to correctly use standard identification guides to report using the correct FAO species code is also essential.