# BODY SHAPES OF FISH



## OVERVIEW

Adaptation is an evolutionary process [something that happens over time] where a creature becomes well suited to living in a certain place [habitat].

We can tell a lot about where and how a fish lives by looking at the features and shape of a fish.

Activities in this topic deepen understanding of adaptation and the way fishes have adapted their shape and features to suit their particular habitat or environment.

See accompanying slide sets Body shapes of fishes.

## FOCUS QUESTIONS

- What patterns do we see in the body shapes of fish from similar habitats?
- What new words and concepts have we learnt?

# LEARNING OBJECTIVES

- Identify key adaptations of fishes to suit their habitat and use a scientific key
- Describe patterns in body shapes of fish that live in the same habitat
- Use scientific and fisheries related vocabulary

### LOCATION

**Indoors & Outdoors** 

#### DURATION

50 minutes + field trip

#### TEAEL

Level 3 - 5

### CURRICULUM

Science

Pūtaiao

### NEXT STEPS

- Marine habitat
- Fish species and food webs





### MATERIALS

- Slide set Body shapes of fishes
- This Teacher Outline
- Access to the internet (for film clip)
- Something to write with and on
- Copies of Scientific keys fish adaptations

## PROCEDURE

- 1. DISCUSS and explore the idea of that fish adapt to their environment (Adaptation) [slide 20].
- 2. INVESTIGATE how the body shape of a fish can give us clues to where and how a fish lives [slide 21] (see also Scientific keys fish adaptations).
- 3. To reinforce learning WATCH short film clips while identifying body shapes of each fish [slide 22].
- 4. USE Scientific keys fish adaptations to figure out key information about how and where different species of fish like to live [slides 23 & 24].
- 5. Extend this learning and RESEARCH to confirm your findings [slide 25].
- 6. WATCH the short film clips of <u>deep water species</u> and <u>pelagic (open ocean) species</u> and consider what adaptations might be necessary to live in these habitats [slides 26 & 27].
- 7. INVESTIGATE adaptations in deep water fish such as the <u>Viperfish</u> or <u>Anglerfish</u>. Find ten cool facts and create a set of true false cards. Share with the class. Review and discuss. What did we learn? What do we want to know more about? How might we find out this information?
- 8. TEST your knowledge of fish body shape habitat adaptations [slide 28] and explore adaptions in one of the MSC certified fish [slide 29]

## KEY WORDS

Adaptation Evolutionary
Pelagic Camouflage





## **CURRICULUM LINKS**

#### Nature of Science (Level 3-5)

- Investigating in science
- Communicating in science
- Participating and contributing

#### **Living World (Level 3-5)**

- Ecology
- Life processes

#### Science (Level 6+)

- Participating and Contributing
- Ecology
- Life processes

#### <u>Pūtaiao</u>

- The Natural World: The Organism: Recognise that there are biological processes common to all organisms, which occur in different ways in different species. The Biological Environment: Recognise and explain the changes undergone by species (especially those of Aotearoa) over long periods of time (Level 4+)
- The Natural World: The Biological Environment: Investigate the effect of human actions, and natural processes, on an Aotearoa ecosystem (Level 6+)

