# S U N O N S S S S S S S Z S Щ TURTL

# TERM 3 WORKBOOK









# TURTLES IN SCHOOLS

Produced by the 1 Million Turtles Community Conservation Program and funded by The Foundation for National Parks and Wildlife. In the pages that follow, you will find a comprehensive set of lesson plans. Our initiative is not just about imparting knowledge but fostering a deep connection between students and their natural environment and instilling a sense of responsibility and awareness of freshwater turtles and their conservation.

As we embark on this educational venture, we extend our gratitude to educators, students, and all those who champion the cause of conservation. The Turtles in Schools Program is not just a curriculum; it is a movement to inspire the next generation of environmental custodians.

#### Thank you,

1 Million Turtles Community Conservation Program

# FOOD CHAINS AND FOOD WEBS

- Learning Intentions
- Background
- Activities
- Curriculum Mapping

Photo credit: Marilyn Connell

### Learning Intentions

(1) Differentiate between a food chain and food web and identify organisms at different trophic levels.

(2) Describe the diet of Australian freshwater turtles and how it varies among species.



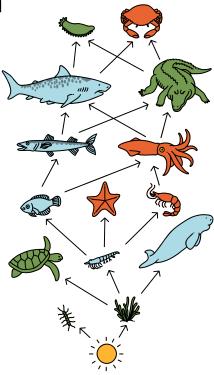
### **Background Information**

#### Food Chain:

A food chain is a linear sequence that shows the transfer of energy and nutrients from one organism to another. It starts with a producer, which is eaten by a primary consumer, which is then eaten by a secondary consumer, and so on.

#### Food Web:

Food webs consist of many interconnected food chains. A food web shows the feeding relationships among different organisms. In a food web, organisms can have multiple predators or prey.



#### Herbivores:

• Herbivores are animals that primarily eat plants.

#### **Omnivores:**

 Omnivores are animals that consume both plant and animal matter as part of their diet. They have a flexible diet and can eat a wide variety of food sources, including fruits, vegetables, meat, and insects.

#### **Carnivores:**

• Carnivores are animals that primarily eat other animals for food.

#### **Detritivores:**

 Detritivores are organisms that feed on decaying organic matter, such as dead plants and animals. They play a crucial role in breaking down and recycling nutrients in ecosystems.

#### Scavengers:

 Scavengers are animals that primarily feed on dead and decaying animals or carrion. They help clean up the environment by consuming carcasses.

#### Trophic Levels:

Trophic levels refer to the positions that organisms occupy in a food chain or food web. Trophic levels represent the different levels of energy transfer and nutrient flow.

- 1. **Producers** such as plants occupy the first trophic level as they convert sunlight into energy through photosynthesis.
- 2. **Primary consumers** animals which feed on plants (herbivores).
- 3. **Secondary consumers** animals which eat primary consumers.
- 4. **Tertiary consumers** larger carnivores that eat secondary consumers.
- 5. **Decomposers -** such as bacteria and fungi, break down dead plants and animals into nutrients that can be used by producers. They play an important role in recycling nutrients in ecosystems.





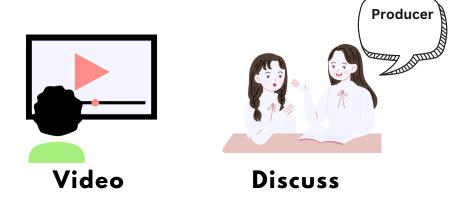
# **Classroom Activities**

#### ACTIVITY 1

(1A) Watch the following video as a class which gives an overview of food chains and food webs.

Link to video: https://www.youtube.com/watch?v=YuO4WB4SwCg [Copy and paste into browser]

(1B) Complete the Video Reflection worksheet.



#### ACTIVITY 2

(2A) Research the diet of an Australian freshwater turtle species.

(2B) Search for information using various forms of literature (i.e. articles, books or printouts).

(2C) Answer the following questions about the species diet:

Q1: What prey items does the species eat?

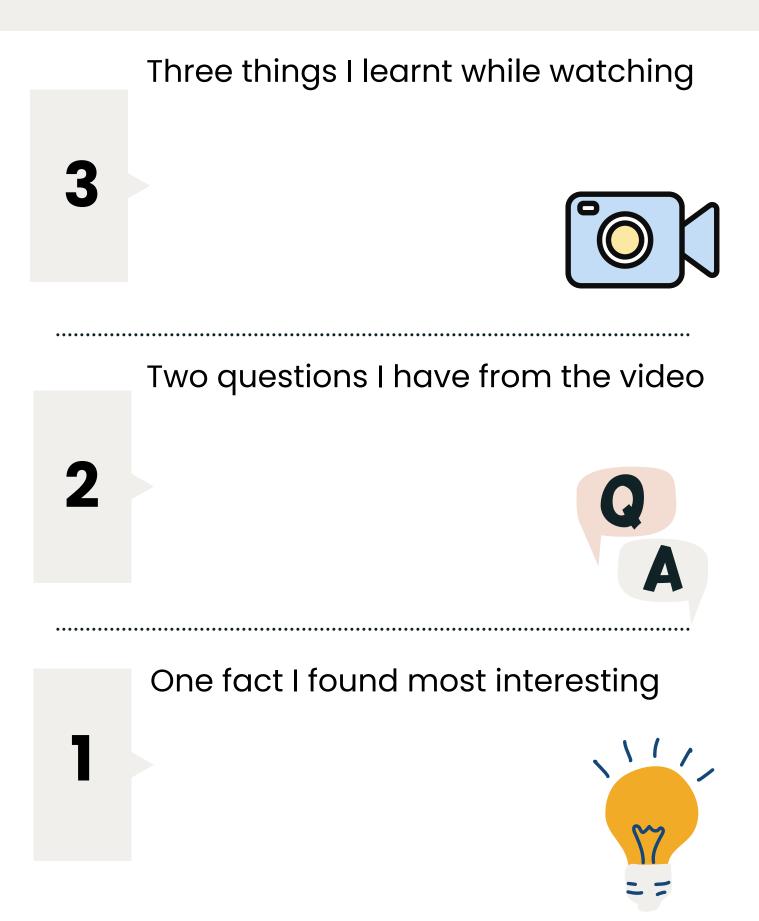
Q2: Is the species a herbivore, omnivore or carnivore?

Q3: How does the species anatomy (i.e. neck length, jaw structure) support the diet?

Include references and/or a bibliography.

(2D) Present the information to your class.

# **Video Reflection**



## **Australian Freshwater Turtle Diet**

Species (common name and scientific name):

What prey items does the species eat?

Is the species a herbivore, omnivore or carnivore?

How does the species anatomy support the diet?

## **Classroom Activities**

#### ACTIVITY 3

(3A) Design a food chain flip book. Your flip book should include your Australian freshwater turtle species from the previous activity.

#### Creating a Food Chain Flip Book -Materials:

- Blank index cards or multiple sheets of A4 paper.
- Scissors.
- Colouring pencils.
- Staple or bulldog clip.

#### Instructions:

- 1. If you are using A4 sheets of paper, divide your paper into quarters and cut out each quarter.
- 2. On each quarter or index card, draw one organism from the food chain along with its name and position in the chain (e.g., "Secondary Consumer: Murray River short-neck turtle, *Emydura macquarii*").
- 3. Number each page of your flip book.
- 4. Staple or bulldog clip the pages together along one edge to create the flip book.

