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**Subject links:**  
Science, Art

Age: 5-7

**Curriculum links:**  
Life cycles, UK wildlife, Biodiversity, Habitats, Ecosystems, Creativity

**Ocean Literacy Principles:**

5. The ocean supports a great diversity of life and ecosystems
6. The ocean and humans are inextricably interconnected.

# Ocean lifecycles

**Sustainability Goals:**



**Learning Objectives:**

- To recognise that animals are living things which grow and identify young and adult of the same species.
- To observe that animals, including humans, have offspring and study a life cycle of a marine creature.
- To understand the habitats are home to and provide shelter for, a variety of creatures both young and old.

**Resources provided:**

- [Who's who? – worksheet](#)
- [Seagrass image reel](#)
- [Catshark life cycle worksheet](#)
- [Curriculum links](#)

**Extra resources required**

Scissors, glue, recycled materials for a craft activity

## Step 1

### Background

The ocean covers 70% of Earth's surface and is home to 50–80% of all life on Earth. The UK's coastal waters are home to a wide range of marine habitats and species. This lesson focuses on how marine animals grow, exploring their life cycle and how seagrass beds act as a nursery habitat.

## Step 2

### Set the Scene

Explain that today you are going to find out more about creatures that live in the sea and how they grow.

Ask students if anyone has been to the sea before or whether they've been to an aquarium. Does anyone know the names of any creatures that live in the sea?

## Step 3

### Activities

#### Activity 1

Explain how all creatures start their life small and grow in size throughout their life. Refer to how humans start their life as babies, grow into children, then into teenagers and finally adults. You could also mention how dogs start their life as puppies. Explain how the same is true of sea creatures. Challenge students to match the baby creatures to their parents using the [Who's who worksheet](#).

#### Activity 2

To further study how species grow throughout their life, students should complete the [Catshark lifecycle worksheet](#). Check students' understanding by asking them questions and having a class discussion.

## Step 4

### Extend

Seagrass beds are an amazing marine habitat for a number of reasons. Introduce this habitat by watching the video in the [Seagrass image reel](#). Use the image reel and the notes provided to show how wrasse use seagrass as a nursery because of the shelter that seagrass provides. Cuttlefish also use seagrass beds to attach their eggs onto the seagrass blades. In small groups, students should use what they have learnt about seagrass beds and life cycles as inspiration to create a 3D marine habitat showing young and adult species in the same environment. Try using recycled materials for your sculptures.

## Step 5

### Follow up

To continue learning about habitats in the sea, take a look at our [Ocean habitats](#) lesson. To learn more about sharks check out our [Stupendous sharks](#) lesson.

# Who's who?

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

Can you match the baby creatures to their parents? Draw a line between to connect the correct images.





# Catshark life cycle

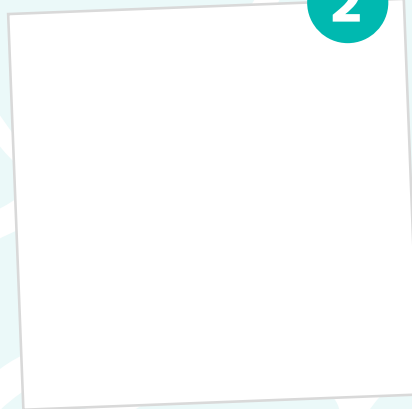
**Adult shark**

1



**Egg**

2



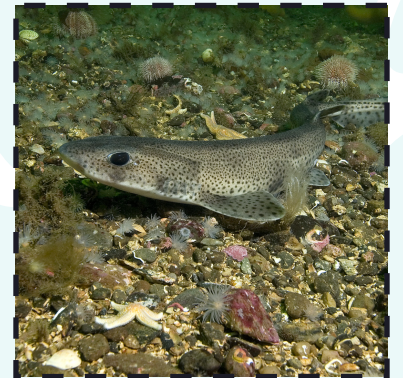
(commonly known as 'mermaids purse')

**Young**

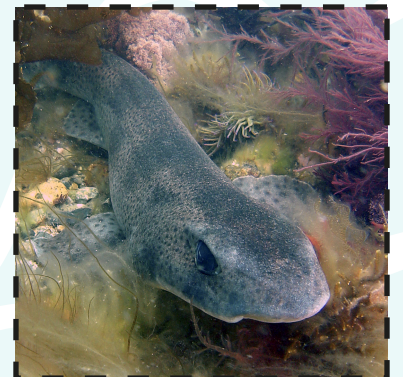
3



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## Curriculum links

### England

#### Science

- Notice that animals, including humans, have offspring which grow into adults.
- Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals.
- Identify and name a variety of plants and animals in their habitats, including micro-habitats.

#### Art

- To use a range of materials creatively to design and make products.
- To use drawing, painting and sculpture to develop and share their ideas, experiences and imagination.
- To develop a wide range of art and design techniques in using colour, pattern, texture, line, shape, form and space.

### Wales

#### Science

- I can explore relationships between living things, their habitats and their life cycles.
- I can explore the environment, make observations and communicate my ideas.

#### Expressive Arts

- I can explore and experiment with a variety of creative techniques, materials, processes, resources, tools and technologies.
- I am beginning to design my own creative work.
- I am beginning to use creative materials safely with guidance and direction.

### Scotland

#### Sciences

- I can recognise that plants and animals are living things which grow.
- I have observed living things in the environment over time and am becoming aware of how they depend on each other.
- I explore and discover the interesting features of my local environment to develop an awareness of the world around me.
- I can distinguish between living and non-living things. I can sort living things into groups and explain my decisions.

#### Expressive Arts

- I can create and present work using the visual elements of line, shape, form, colour, tone, pattern and texture.
- I can create a range of visual information through observing and recording from my experiences across the curriculum.