

Underwater Worlds

DISCOVERY ACTIVITY

ACTIVITY OBJECTIVES

- To identify the needs of aquatic animals
- To describe how human actions impact aquatic animals, with particular focus on plastic pollution
- To explain how humans can live in harmony with aquatic animals
- To recognise that aquatic animals may look very different from land animals and can also feel or perceive things (are sentient)

KEY QUESTIONS

- Do animals that live in water (aquatic) have similar needs and feelings to us?
- Whether it's in our home or visiting where they live, how can we make sure we don't negatively impact their environment?
- Should you pet, touch and play with aquatic animals in the wild?

RESOURCES

- Printable 'five welfare needs' spinner
- Collected plastic objects - including some of the objects listed in the extension activity on page twelve

Due to the topics covered in the Compassionate Class programme, it is important to consider how different children may react. For more information on creating a safe teaching and learning environment, see guidance on pages five to seven of the Teacher Overview downloadable at: rspca.org.uk/ccresources.

For information on how to adapt Underwater Worlds to support pupils with SEND, see guidance on page thirteen of this document and pages eight and nine of the Teacher Overview.

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STIMULUS

Short animation about Kenny the Crab

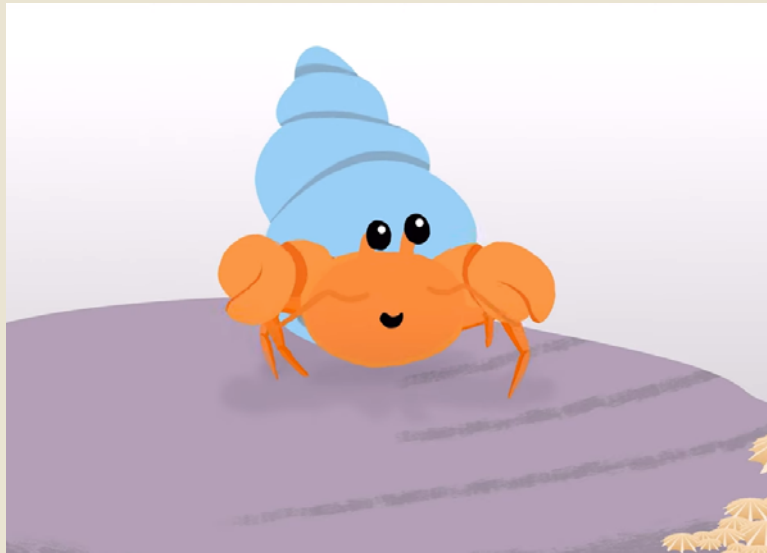
**15
MINS**



Start by asking the class: What aquatic creatures (animals that live under water) can you name? Do these animals have the same thoughts and feelings as those that live on land?

Record their thoughts in the box on slide two or print the slide for pupils to write on. This can be used as a baseline assessment to capture pupils' initial understanding and we encourage you to revisit these thoughts at the end of the session.

As a class, watch the animation about Kenny the Crab.



**SLIDE
2-3**



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STIMULUS (CONTINUED)

As they watch, ask children to make a note of how the crab might be feeling. Allow a few minutes for children to share what they noticed, before asking the prompt questions.

If you are working with lower ability or younger groups, you could create a word bank in advance and instead ask children to listen out for the words as they watch. Talk through the meanings of the words using the animation to help.

Use slide four, and the information on the next page, to support the discussion if needed.

PROMPT QUESTIONS

- Have any of them seen a crab before? What is their natural habitat?
- What can we do to prevent animals like Kenny the Crab from getting into situations like this?
- What do you think the crab would say about plastic if he could speak to you?

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AQUATIC ANIMALS FACT BOX

- Aquatic animals can look very different to the animals we see on land, but they can feel things like fear, pain, happiness, sadness, and many other emotions. They deserve our respect and appreciation, and we can live in harmony with them by taking good care of the wild places we visit
- Aquatic animals in the wild have varied emotional and social lives, and deserve the opportunity to live free of negative human impact
- We can also think about their needs and feelings when they live in captivity, whether as our pets or at aquariums
- Humans can't read fish's feelings as clearly as we can mammals and for us to understand their complex biological, environmental and behavioural needs takes a great deal of research, preparation, time and care
- Owning an aquarium of fish can be rewarding but it's a big responsibility. Fish aren't simple creatures to look after — they have very specific needs and require focused and regular care. Did you know that if you own or are responsible for pet fish, you must know and meet all their needs? **You can find out all you need to know here**

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INTRODUCTORY DISCUSSION

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10
MINS

Explain that animals who live in water can have feelings just like animals who live on the land. They also need the right living conditions in order to be healthy and happy.

Although they might not look as cute as a puppy or a kitten, they are just as important. Discuss what we mean by sentient; we call animals 'sentient' because they can feel things such as pain, fear, pleasure and happiness. Many aquatic animals, therefore, are sentient.

Show slide five and look through the images of the aquatic animals. Each of the animals are affected by what is happening in the water around them. Ask children to think about a time when they have been to the beach or been swimming outside. Did they think about the animals that might live in the water and how they might be affected?

Use the prompt questions to draw out further responses.

PROMPT QUESTIONS

- Do animals need to look like us to feel the same things that we do?
- Do aquatic animals have the same needs as land animals?
- When you visit beaches, lakes, or rivers, what can you do to keep the environment safe for the animals that live there?
- If you have an aquatic animal as a pet, what do you think you need to do to keep them happy and healthy?

A purple hand icon with the text 'SLIDE 5' inside the palm.

SLIDE
5

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TASK

**20
MINS**

A letter from Kenny the Crab

Explain to the class that they will be working together to explore the needs of Kenny the Crab from the animation. Ask them to start by sharing their observations of what needs Kenny might have - these could be living in a natural, clean environment, plenty of food, freedom from plastic pollution etc.

Next, ask them to imagine that they are Kenny the Crab, and write a short letter to the humans that he sees playing on the beach. Encourage them to include:

- Some of the ways humans can impact the environment
- What Kenny thinks of plastic pollution and how it could be reduced
- Persuasive language that Kenny might use to explain why plastic is harmful, and to get humans to see it from Kenny's point of view

ALTERNATIVE TASK

**15
MINS**

Think about how we might meet the needs of aquatic animals in captivity. Using the **'five welfare needs' spinner** and the images on slides five and six, identify how, and if, these aquatic animals could have their needs met in captivity (e.g. aquariums or at home).

**SLIDE
5****SLIDE
6**

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CLASS DISCUSSION: HOW HUMANS IMPACT UNDERWATER WORLDS

10-20
MINS

A blue hand icon with fingers spread, positioned next to the '10-20 MINS' text.

Remind children to listen respectfully to each other, without interruption and to build on the ideas and questions.

First ask the children how they think humans impact underwater worlds. Try and get them to think about the different places they might have been, e.g. a river, a lake, a pond etc. and get them to think about how in each setting a human might disturb the underwater environment.

Show them slide seven and discuss what is happening in each picture, and how the creatures have been impacted by humans.

Watch one of the suggested videos and discuss them using the prompt questions.

How did we get a world full of plastic? or

What happens to plastic when we throw it away?

PROMPT QUESTIONS

- Whose responsibility is it to make sure plastic doesn't end up in places where aquatic animals live?
- How can we use less plastic at home and at school?

If you have time, take a look at the creative extension activity on page twelve. Students can use what they have learnt in this discussion to create their own litter timeline.

SLIDE
7

A pink hand icon with fingers spread, positioned next to the 'SLIDE 7' text.

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SESSION SUMMARY

Invite the pupils to revisit their initial responses recorded on slide two. Ask each pupil to think of a question or thought from the session that they would like to explore further, or something new they have discovered today.

Encourage pupils to share these with the rest of the class and record them under their initial ideas on slide two. By saving the PDF, you can return to these thoughts in another session.

A blue handprint icon with the text '5 MINS' inside the palm.

5
MINS

A pink handprint icon with the text 'SLIDE 2' inside the palm.

SLIDE
2

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OPTIONAL ACTIVITY: AQUATIC QUIZ

10
MINS

Read each of the questions out and ask the class to raise their hands if they think it's true and then if they think it's false. Reveal the answers along with the fun facts.

- Goldfish actually have good memories - they can remember events several months after they have happened [True]
- One species of fish has the ability to change shape every five seconds [False - but did you know that some species of fish can change their gender A Clownfish can - like in Finding Nemo!]
- Archer fish can be trained to recognise over 40 different human faces [True]
- Dolphins can jump more than twelve metres in the air! [False - however, they can jump extremely high. Bottlenose dolphins can jump six metres, which is as high as a house!]
- Octopuses can recognise and change their behaviour with different humans [True - One captive octopus was reported to have taken a dislike towards a member of aquarium staff - the octopus would shoot a jet of water at the staff member every time she passed!]
- Mimic octopuses can change their colour, contort their bodies and change their behaviour to mimic lionfish, jellyfish, sea snakes, shrimp and crabs [True]

Show the video of '**The Ultimate Octopus Disguise**' to highlight how interesting aquatic animals can be!

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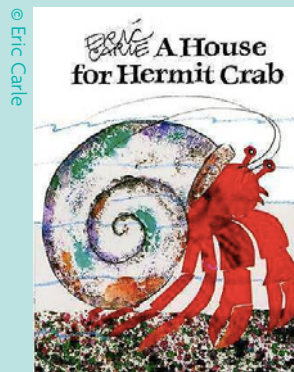
EXTENSION RESOURCES

To take the learning from this discovery session further, you could explore our suggested extension resources.

Books and TV



The Sea, exploring our blue planet
by Miranda Krestovnikoff



Eric Carle's 'A House for Hermit Crab'



Blue Planet and Blue Planet 2 documentaries

Online Resources

Explore the needs of fish: **Environment**, **Diet**, **Company** and **Health and Welfare**.

Discover **how littering can affect animals**.

Ask pupils to compare and contrast photographs of beaches, and brainstorm how humans can impact aquatic creatures, using one of the National Geographic activities: **Healthy Beaches** or **How people affect ocean animals and plants**.

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EXTENSION RESOURCES (CONTINUED)

Crustacean Compassion

Lead a discussion with the pupils around whether crustaceans deserve the same animal welfare rights as other animals.

Keep Britain Tidy

Talk to the students about how litter picking can make a big positive impact on the environment.

FURTHER CLASSROOM ACTIVITIES

- Host a litter pick at rivers, lakes or a green space near the school. Once the pupils have completed the litter pick, ask them to write down their experiences, what they saw and how it made them feel
- Think about how your school can reduce plastic use in the school and create a campaign. It could start with looking at the plastic used in the classroom and how that could be reduced. Then help your class to deliver an assembly around how plastic waste can harm the environment, and how the school can reduce the amount it uses
- Research interesting facts about aquatic animals and ask students to create their own Top Trump cards. You can find templates online



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CREATIVE EXTENSION: PLASTICS TIMELINE

This creative activity will help children understand how long different types of plastic last before they decompose.

Ask children to bring in plastic items from home, or start by going outside and completing a litter pick to see how much plastic rubbish you can find in the playground. You can add to the real plastic items by printing pictures of the items on the list below, which can be found in the **extension activity PDF**.

- Sweet wrapper: 1-3 months
- Plastic bag: 10-20 years
- Flippers (or just a type of shoe): 50-60 years
- Fizzy drink can: 200-500 years
- Fishing line: 600 years
- Plastic straws: 200 years
- Plastic bottles: 450 years
- Plastic cup: 450 years

You could ask children to work in groups to draw their own timelines, or create a larger scale classroom display. Ask children to plot out the items in the order in which they think they decompose, and then add the length of time underneath, before revealing how long each object takes to decompose. Ask them if they are surprised and what it makes them think about.



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ALTERNATIVE RESOURCES TO SUPPORT PUPILS WITH SEND

The activities below are suggestions to help you adapt the Underwater Worlds activities to support your pupils' needs.

STIMULUS (PAGES TWO AND THREE)

When asking the children about aquatic animals that they can name, it may be useful to have some visuals ready to share as they may not have had direct experience of them. The **Sea Life Centre** has lots of information and pictures you could use, or you could show **this video** which has clips of lots of different animals.

Before showing the animation, it may be useful to show the children what a rock pool is, and the aquatic life found there. Use this **BBC video** to help illustrate.

Watch the Kenny the crab animation and then pause on the birds-eye view of the rock pool at the start. Get the children to identify the animals in the pool (circle animals in one colour) and things that they don't think belong there (circle the plastic waste in another colour).

TASK: LETTER FROM KENNY THE CRAB (PAGE SIX)

Using a range of collected resources (such as rocks, shells, bits of plastics, sand, soil and water), ask the children to choose what they think would be suitable and make a rock pool for Kenny. Get them to think about what he would like and discuss what they have included, adding labels to each bit. Have some plastic waste as part of the available resources to use - do the children want to add it to the habitat? Why not? Once complete, ask the children what they could do when visiting the beach to keep the rock pool looking like this.





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WHAT NEXT?

If this is your first Discovery activity, pick another stimulating activity to complete with your pupils.

If you've already completed at least two Discovery activities, choose an Advocacy activity that will provide your pupils with an entry for the Compassionate Class competition.



Advocacy activities

IF YOU LIKED THE 'UNDERWATER WORLDS' DISCOVERY ACTIVITY, WHY NOT TRY THESE ADVOCACY ACTIVITIES

VISITING WILDLIFE TOP TIPS

Working individually, the children need to imagine they are arranging a trip for them and their friends to the beach. But before they go, they have to make sure everyone who might be going on the trip understands how to respect their surroundings and make sure they don't disturb the habitats of the animals living there.

- Design a poster that you can display around the school which lists the top three things to do that will make sure you do not harm the environment at the beach e.g. take litter with you, don't touch any plants or creatures you see
- Share what you include on the posters with other classes in an assembly

MY DREAM HOME

Imagine you are an aquatic animal living in the wild, being interviewed by a television reporter about your dream home.

- One of the pupils can be the reporter, and can come up with questions to ask the animal about their dream home
- The pupil who is playing the animal must share what their home would look like, whether they want neighbours, what they would and wouldn't like stocked in their underwater fridge

AQUATIC ART

Using litter that you have collected, create an art installation of an aquatic animal. It should include lots of types of plastic of all different sizes and shapes.

- Display at school and invite the wider community to raise awareness of plastic pollution