



## DISCOVERING WHY DIVERSITY GIVES STRENGTH - BIOMIMICRY

### OBJECTIVE

Discover that diversity in nature can lead to developments in man-made products.

### POND DIPPING (30 mins)\*

Use a net to take samples from the pond and observe the features of the freshwater animals found.

- How many different animals can you find?
- Do all the animals live in the same place in the pond?
- Why is diversity important in the pond?
- What might happen if only one animal lived in the pond?



**DIVERSITY**  
Having or being made of differing elements.

### KEY COMPETENCIES

- Using imagination
- Communicating ideas
- Analysing information
- Reflecting & Evaluating

### COOL CREATURE FEATURE (15 mins)\*

Look at the features of the animals you found in the pond. Alternatively if you were not able to access a pond then look at the creature factsheets. Fill in the worksheet to help identify the following:

- What unique features do they have?
- How do these features help the animal?
- How could we use this feature in product design?

Share your ideas with other members of your learning group(s).



IM14 Cool creature feature worksheet  
DM4 Pond creature factsheet





## CURRICULUM LINKS

Biology<sup>1</sup> and Design & Technology<sup>2</sup>

- Organisms have adaptations to help them survive<sup>1</sup>
- Organisms have a range of sizes, features and complexity<sup>1</sup>
- Organisms that have similar features and characteristics can be classified together<sup>1</sup>
- Biodiversity is the number and variety of different species in an area<sup>1</sup>
- The natural form can be a starting point for design<sup>2</sup>

### CARD SORT (5 mins)\*

Match the organism to the product it has inspired. These are examples of biomimicry.

Check the answer sheet to see if you matched them correctly. Can you think of any more examples?



### BIOMIMICRY

The word can be broken down into more understandable parts: 'bio' meaning life and 'mimicry' meaning to imitate.

*IM15 Biomimicry card sort*

*IM16 Biomimicry card sort answers*



### REFLECTION (5 mins)\*

You have discovered that Diversity gives Strength in nature. Add notes to the Reflection sheet and chart your progress on the Learning wall.

Visit the Share page of [www.lessonsfromnature.org](http://www.lessonsfromnature.org) to comment on the activities you have taken part in.

The Diversity gives Strength insight can also be looked at in terms of evolution. Explore the insight further by taking part in Understanding Diversity gives Strength activities.

