**BIOLEARN**

**TEACHER'S PAGES**

# STAGE THREE – YOUR DESIGN SOLUTION
**Teacher Notes**

In the final stage, students combine insights from nature with their design challenge. How can biomimicry make their solution better and more sustainable?

Students need to think about how to present their design solution so that it demonstrates how biomimicry has helped. Complete the biomimicry evaluation wheel to reflect on and improve your ideas.

> *We suggest you:*
> * *Present the Biomimicry Design Canvas and Evaluation Wheel (10 mins).*
> * *Present the judging criteria (10 mins).*
> * *Allow time for students to work on their final design (45 mins lesson / set as home-based task).*
> * *Use the Evaluation Wheel to help students refine their design if necessary.*
> * *Ensure students create a digital version of their design solution to submit online.*

The following resources will support you.

### 1. Biomimicry Design Canvas

A planning tool to help students collate all their ideas in one place. You might like to introduce this at the start of the challenge. Invite students to work through the 4 steps in order.

### 2. Evaluation Wheel

The evaluation wheel encourages students to reflect on their design using the biomimicry principles. It offers an opportunity to think how their design solution can be improved. As part of the challenge, the judges would like to see how students have applied biomimicry principles. Designs do not need to include all the biomimicry principles, just those which are relevant.

Students can submit the evaluation wheel as part of their challenge entry if they wish. It will help to demonstrate how they have thought about and used biomimicry in their solution.

### 3. Presenting Design Solutions

Students are free to present their design solution in their own format. These can be uploaded as Word, Excel, PPT, PDF, Image, Video or Audio files up to 100 MB in total. Important, read the judging criteria to ensure each design solution is well presented.

### 4. Judging Criteria

Each challenge entry will be evaluated against the following criteria:
* Applying biomimicry (evaluated through teams completing evaluation wheel and accompanying questions) – 25% weighting.
  *Question: which biomimicry principles have you used and how have you applied them?*

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- Creativity (are teams copying what they find online or are they rethinking these for their context, or creating something original?) – 20% weighting.
  *Question: have you created a new solution to an existing challenge, or used existing ideas in new ways?*

- Context and relevance (does the solution take into account and work with the situation?) – 20% weighting.
  *Question: explain how your solution works well in your situation; are there ideas you chose not to use? Why?*

- Social and environmental benefits (is it worthwhile and can it make a significant difference) – 20% weighting.
  *Question: what social and/or environmental benefits does your solution provide?*

- Presentation (is the solution clearly communicated) – 15% weighting.

5. **Challenge Rules and Regulations**

Make sure you have read these before submitting student work.

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