I feel that the skills I have learnt and the problems that we overcame have really benefited me in becoming more confident within myself.

Finalist, Pupil Design Awards
<table>
<thead>
<tr>
<th>Contents</th>
<th>Page no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>4</td>
</tr>
<tr>
<td>Competition timeline</td>
<td>5</td>
</tr>
<tr>
<td>How to think like a designer</td>
<td>6</td>
</tr>
<tr>
<td>How to approach the briefs</td>
<td>7</td>
</tr>
<tr>
<td>Brief 1: <strong>Food for thought</strong></td>
<td>11</td>
</tr>
<tr>
<td>Brief 2: <strong>Learning to belong</strong></td>
<td>13</td>
</tr>
<tr>
<td>Brief 3: <strong>Green streets</strong></td>
<td>15</td>
</tr>
<tr>
<td>Brief toolkits</td>
<td>17</td>
</tr>
<tr>
<td>Judging criteria</td>
<td>18</td>
</tr>
<tr>
<td>How to submit your work</td>
<td>19</td>
</tr>
<tr>
<td>Judging process</td>
<td>20</td>
</tr>
<tr>
<td>Glossary</td>
<td>21</td>
</tr>
</tbody>
</table>
Introduction

Calling all creative problem solvers! At the RSA, we believe in a world where everyone is able to participate in creating a better future. Through our ideas and research, a 30,000 strong Fellowship, and our collaborators and partners, we are a global community of proactive problem solvers uniting people and ideas to solve the challenges of our time.

The RSA has always championed the power of design for public good. Now, through the RSA Pupil Design Awards, we invite you to join our community of changemakers. We are calling on you to demonstrate how design has the potential to unravel complex problems, explore new possibilities and unlock new ways to meet the needs of people and our planet.

The Pupil Design Awards’ vision is one in which young people develop creative confidence through engaging with real-world challenges facing people and the planet and leave school with capabilities which enable them to flourish in their personal lives and contribute to the flourishing of their communities. We do this by:

- Broadening teachers’ and pupils’ understanding of how design can be applied and understood.
- Introducing design thinking to teachers and pupils.
- Connecting schools to their local communities and enabling pupils to design solutions to local and global contemporary challenges.

Our 2021-22 briefs pose tough challenges and we hope they open up a range of possibilities for you to present creative designs. How might we rethink our current food system to design out waste? How might we restore nature to urban spaces to ensure that people and the planet thrive together? How might we ensure that schools become places of belonging for all pupils?

We know that amongst you there is an abundance of talent, appetite, and determination to address the challenges of today and paint tomorrow with hope. We can’t wait to see what’s in store this year!

RSA Pupil Design Awards Team

About the Pupil Design Awards:

The RSA Pupil Design Awards is a free, national design competition for secondary school and sixth-form pupils aged 11-17.

Pupils are encouraged to use their creativity and imagination to tackle real challenges facing people and the planet.

Schools are provided with lesson plans, training, and mentors to support participation. Teams or individuals submit design proposals and material explaining how they approached their problem.

Finalists present their ideas to industry expert judges in three year group categories (Years 7 & 8, Years 9 & 10 and Year 12).

The 2021-22 RSA Pupil Design Awards are brought to you by The Comino Foundation with additional support from Fixperts.
Competition timeline

September
Awards launch
New briefs and resources are uploaded on to our website, and registration for teacher workshops opens.

March – April
Mentor visits
Support on your proposals from professional designers and former winners of the Student Design Awards.

20 May
Submissions close
Your teachers have until 4.00pm on 20 May 2022 to submit your work.

November
Teacher workshops
Free training workshops co-delivered with design education specialists, Fixperts, supporting teachers to deliver the Awards.

19 April
Submissions open
Online submission platform Skipso opens for teachers to upload their pupils’ work.

June
Judging sessions & awards ceremony
Two-stage judging process, with judges selected from professionals working across design, academia and education.
**How to think like a designer**

**Design thinking** is a process and a mindset used to tackle complex problems. It can help us explore new alternatives and to imagine and bring to life ideas that didn’t exist before. It offers us an opportunity to design with communities, to deeply understand the people we’re looking to support, to be creative, and to come up with new answers that respond to people’s needs and motivations. It is a flexible and non-linear process, where you can go back and forth as many times as you need to reach an idea that addresses the problem you have identified.

**The non-linear design thinking process**

- Research and insight
- Ideate
- Prototype and test
- Reframe the problem
- Refine and communicate

**What is a design brief?**

You’ll receive a design brief at the start of your project to give guidance and focus, whilst leaving room for open ended, creative responses. A good brief helps frame the challenge you are being asked to explore and provides detail on important considerations and key information.

Once you have your design brief, you can then apply your design thinking and start on your design journey. Make sure that throughout your project you constantly refer back to your design brief to ensure your proposal is responding to the challenge you have been set.

**Mentor Tip:**
The communication of your proposal on the six boards is key. We suggest sketching out rough versions of each board to develop as the Awards go on. Start early and treat it as a live document!

**What is a design proposal?**

You’ll be submitting a design proposal at the end of your project once you have completed your design journey, to summarise your idea and communicate it to others. Make sure your proposal responds to each area of the submission criteria.

Stories are the most powerful way to communicate your proposal and your experience of the design journey. Think about how to get your audience interested in your idea and craft a short, engaging story focusing on the most important aspects of your proposal. For example: name the brief you’ve explored, describe what inspired your idea, your key findings from your research, how it responds to the needs you learnt about and explain how you have tested and developed your proposal further.

A good design proposal brings your idea to life, communicates its value, and explains how it makes a positive difference to the natural world or people involved.
How to approach the briefs

Applying a design thinking approach:

**Research and understand people’s needs and motivations:**
Undertake primary research to help understand the needs and motivations of the people affected by the problem posed in the brief. This could be done in different ways, such as through interviews, conversations, observation and stories. Make sure you capture your findings (what does the research say?) and insights (what did you learn? This can include patterns or behaviours that might lead to ideas).

**Reframe the problem:**
Choose a specific problem within the brief that you would like to solve and consider your audience. Who is currently affected by this problem? They will be your partners in this process. When applying design thinking, we focus on people as the source of inspiration and direction for our ideas.

**Ideate:**
Let your imagination flow and explore lots of ideas that address the problem in the brief (don’t be afraid of including silly ideas!). Once you have come up with as many ideas as you can, you might want to focus on one or two that seem interesting and original.

**Prototype and test:**
Experiment and develop your idea further and try to make it visual and tangible. For example, make a drawing that explains a process or create a product out of cardboard. Share your proposal with your audience and gather lots of feedback. Iterate your idea based on that feedback. Your audience will help you to improve your proposal and make it even better.

**Refine and communicate:**
Once you have modified your proposal, refine how to present it. In particular, consider the way you are going to communicate and think about following this structure: what, how, for whom, and why. How will your idea work in the real world?
How to approach the briefs

Tip from RSA Pupil Design Awards mentors:

In certain circumstances it may be difficult to conduct detailed primary research in your local community, however you can always speak to friends and family to gain insights, just ensure you demonstrate how it fits into your design thinking process. For example, have you reframed the problem based on speaking to somebody? Have you asked for feedback after prototyping and testing your idea?

The key is to find the balance between the big, broad issues and small, laser-focused practical ideas. We encourage pupils to locate specific problems in their findings gathered through their research. Specific problems will have connections to wider issues and if you can demonstrate this when communicating your idea, it will be a more powerful submission.

The Pupil Design Awards’ briefs are challenging and contain multiple problems within them. We’re not expecting you to develop one single proposal that solves everything, judges are interested in understanding your design thinking process and that you’ve considered the judging criteria throughout your project.

We understand in some of your proposals you may be incorporating new technologies. We encourage you to think about the intended impact that underlies the technology, rather than the specific detail of how it’s made. Make sure you communicate this impact on your boards!

Every year we receive a lot of submissions focused on apps. Apps can be a great approach if your research and feedback have led you towards that outcome. However, we encourage you to explore a variety of options – proposals could be workshops, services, campaigns or anything you can imagine, be curious and explore!

Remember the design thinking process is non-linear, you can go back and forth between the different stages. Judges want to see multiple initial ideas from your research and prototyping, show them you’ve developed your proposal. Iteration is crucial to the process.
Design thinkers are...

unlike other problem solvers

we tinker and test, we fail early and often

and we spend a surprising amount of time

not knowing the answer to the challenge at hand.

And yet, we forge ahead.

We’re optimists & makers, & experimenters & learners

We empathize & iterate, we look for inspiration in unexpected places
We believe that a solution is out there that by keeping focused on the people we’re designing for and asking the right questions, we’ll get there together.

We dream up lots of ideas, some that work and some that don’t.

We make our ideas tangible so that we can test them, and then we refine them.

In the end, our approach amounts to wild creativity, a ceaseless push to innovate & a confidence that leads us to solutions we’d never dreamed of when we started.
FOOD FOR THOUGHT

BRIEF 1
How might we rethink our current food system to design out waste?

Background

Food plays a central role in all of our lives. It determines our physical and mental health, shapes our daily routines and social interactions, and is an essential part of our communities and economy.

However, a huge amount of food waste occurs throughout the system, at a time of growing food insecurity. This isn’t only in households – much of this waste takes place in the hospitality and food service sector; and the manufacture, retail and wholesale sectors.

Waste doesn’t only take the form of edible food; many inedible by-products of food production are discarded before food reaches shops or aren’t captured and separated properly by food businesses during disposal, rather than being reused as inputs for agriculture and bio-energy.

This is a big problem because the way our food is produced is damaging our planet’s natural systems. A huge amount of energy and resources are required throughout the different stages of the food system to grow, harvest, transport, and package goods. As a result, industrial food production is one of the biggest contributors to deforestation, freshwater pollution, biodiversity loss, and climate change.

Consider all of these different forms of waste, and how they appear at different stages of the food production process. How do they relate to each other, and to other social issues like poverty, inequality, and the climate crisis? What if we saw these forms of waste as design problems and tried to prevent them right from the beginning?

What needs to change?

We need to reimagine our current model of food production to be more circular, in order to design out waste at all stages of the system; ensure that products and materials are kept in use instead of discarded; and to regenerate natural systems rather than degrading them.

Key Statistics:

• Over 2 million tonnes of food that goes to waste each year in the UK is still edible – enough for 1.3 billion meals (WRAP, 2019).

• Food bank use has increased by 128% compared to this time five years ago (The Trussell Trust, 2021).

• About 21–37% of total greenhouse gas (GHG) emissions are the result of the food system (IPCC, 2019).

• Food waste itself is estimated to contribute 8-10% of total man-made greenhouse gas emissions (IPCC, 2019).

How to approach the brief

• We encourage you to create design proposals that consider them within wider systems. Think about all of the different stages of the food system and where you might be able to intervene. Think about different actors in the system – don’t just focus on the individual consumer or household. Could your proposal address the brief from the perspective of food manufacturers, retailers, local or national government, restaurants, waste management companies, or farmers? Once you’ve spotted an opportunity you can then zoom in to learn more about the issue, then zoom out again to look at the wider impact it has on the rest of the system you’ve identified.

• Once you have identified a problem to focus on, co-design through conversations with the potential audience of your proposal, making sure you understand their needs and motivations. Try to talk to both professionals and people with lived experience.

• Test and prototype your ideas early. Real world problems require real world ideas that need to be tried and tested to see if they stand up and where they might be improved further.

• Think about the long-term impact of your proposal. How might your proposal ensure that we’re acting as ‘good ancestors’ in creating a better future for generations to come?
How might we ensure that schools become places of belonging for all pupils?

**Background**

The past two years have demonstrated how crucial schools are in ensuring the safety and wellbeing of young people.

At the same time, the pandemic has exposed the many divisions and inequalities that exist within the education system, including concerns about the rapid increase in rates of exclusion, disconnection, and a sense of not belonging among young people in school, and the impact of this on their wellbeing, mental health and opportunities in later life.

‘Belonging’ is the sense of being somewhere you are confident that you will fit in. It means you feel valued because of who you are and feel an affinity to a place as a result.

For schools, this could be achieved through strong and meaningful pupil-adult relationships, strengthened relationships between parents and the school, support for pupils transitioning from primary to secondary school, through promoting diversity in schools, and through strengthening pupil voice.

As you can see from the statistics below, there are many reasons why certain children might experience exclusion and a lack of belonging at school. A reduced sense of belonging can lead to pupils feeling disconnected from school and investing less in it, affecting their academic outcomes, mental health, and wellbeing.

**What needs to change?**

For a child to flourish in school and in later life, all schools need to become places of belonging. Schools should be environments where all pupils feel safe and have a sense of attachment to the school community. This means pupils are more likely to be motivated at school, experience positive health and wellbeing outcomes, and attain improved academic outcomes.

**Key Statistics:**

- 1 in 4 young people feel they do not belong in school (UCL & National Education Union, 2020).
- Children from disadvantaged communities, from certain minority ethnic communities, and those with special education needs (SEND) are more likely to be excluded from school (RSA, 2019).
- Boys are more likely to receive formal fixed or permanent exclusions, but research shows girls are at disproportionate risk of being excluded by other ‘invisible’ means, such as school moves (Social Finance, 2020).
- Half (48%) of LGBT+ secondary school pupils say they have received little to zero positive messaging at school about being LGBT+ in the last 12 months (Just Like Us, 2021).
- 37% of pupils with SEND reported being bullied based on other pupils’ attitudes or assumptions towards their SEND at least once in the past year (Department for Education, 2019).

**How to approach the brief**

- Think about your school – are there times where you or other pupils have felt like you don’t belong to the school community? What may have led to that? What could you do to ensure all your peers feel safe? What could teachers do? How could pupils and teachers co-design proposals together? How could pupils lead the way in creating a sense of belonging in schools?

- We also encourage you to create design proposals that consider the wider system in which the problem you have identified is situated in. Think about the reasons outside of school that might lead somebody to feel like they don’t belong in school.

- Once you have identified a problem to focus on, co-design through conversations with the potential audiences of your proposal, making sure you understand their needs and motivations. Try to talk to both professionals and people with lived experience.

- Test and prototype your ideas early. Real world problems require real world ideas that need to be tried and tested to see if they stand up and where they might be improved further.

- Think about the long-term impact of your proposal. How might your proposal ensure that we’re acting as ‘good ancestors’ in creating a better future for generations to come?
GREEN STREETS

BRIEF 3
How might we restore nature to urban spaces to ensure that people and the planet thrive together?

Background

Amidst mass biodiversity loss caused by human population growth and overconsumption, cities and towns around the world are finding new ways to protect and return nature to their communities.

Biodiversity is crucial for our planet’s natural systems to flourish and human survival depends on it. Naturally functioning ecosystems provide us with clean air and water, prevent flooding, store carbon, and help us to adapt to the climate crisis.

Many of the attempts to restore biodiversity happen in large, rural, wild areas. But smaller-scale attempts can take place in urban areas too. Efforts to restore nature to cities and towns might include letting wildlife reclaim areas, or introducing new architectural or landscape design features, like growing greenery on buildings.

One of the main benefits of restoring nature to urban areas is the positive impact it can have on humans’ physical and mental health, particularly for those with less access to outdoor space. Spending time in green space or bringing nature into everyday life, by doing things like community gardening, exercising outdoors or being around animals is associated with positive benefits for mood, a reduction in stress, and provide opportunities to be more active.

The design of urban environments such as our neighbourhoods also affects how communities interact, by supporting access to family and friends, health services, community centres, and spaces for people to build relationships and strengthen social ties.

What needs to change?

The things we produce (like the products, campaigns, or services you might design) must become a force for restoring the environment instead of degrading it. In turn, we can expect nature to restore our own health and happiness, and that of our communities. It’s in this way that you might begin to understand how your proposals could focus on the reciprocal relationship we have with the natural world.

Key Statistics:

• The vast majority (83.9 per cent) of the UK’s population live in towns and cities (Statista, 2020)
• There are 295 deprived neighbourhoods of 440,000 people in the UK, with no trees or accessible green space (National Trust, 2021)
• 15 per cent of species within the UK are threatened with extinction (National Biodiversity Network State of Nature Report, 2019)

How to approach the brief

• We encourage you to create design proposals that consider them within wider systems. Think about the reciprocal relationship between humans and the environment when you’re designing your proposal. How is your proposal ensuring that people and the planet thrive together? Once you’ve spotted an opportunity you can then zoom in to learn more about the issue, then zoom out again to look at the wider impact it has on the rest of the system you’ve identified.

• Once you have identified a problem to focus on, co-design through conversations with the potential audience of your proposal, making sure you understand their needs and motivations. Try to talk to both professionals and people with lived experience.

• Test and prototype your ideas early. Real world problems require real world ideas that need to be tried and tested to see if they stand up and where they might be improved further.

• Think about the long-term impact of your proposal. How might your proposal ensure that we’re acting as ‘good ancestors’ in creating a better future for generations to come?
We have collated a range of resources to inform and inspire your thinking. Take a look below for brief specific toolkits:

**Brief 1**

How might we rethink our current food system to design out waste?

Some existing examples that might meet this brief include…

- **ChipsBoard**: a biomaterials company creating products from food waste, built on circular economy principles
- **FoodCycle**: a UK charity that combines surplus food, spare kitchen spaces and volunteers to create three-course meals for people at risk of food poverty and social isolation.
- **Apeel**: Apeel uses materials that exist in the peels, seeds, and pulp of fruits and vegetables to create a protective extra peel that seals moisture in and keeps oxygen out.

Further resources:

- What is a circular economy?
- The circular economy in action (see ‘Food’ section)
- Youth consultation for the National Food Strategy (see in particular ‘closing youth statements’ on p.31)

**Brief 2**

How might we ensure that schools become places of belonging for all pupils?

Some existing examples that might meet this brief include…

- **Peer Mentoring Toolkit (HeadStart Kent)**: Peer mentoring has been evidenced as having a positive impact on the emotional health and well-being of children and young people, and can be used to improve a sense of belonging in schools
- **Smart School Councils**: a whole-school approach to democracy, involving all children’s voices in decision-making, enabling pupils to learn a broad range of key skills as a result.

Further resources:

- Place and belonging in school: why it matters today. Case studies (UCL & National Education Union)
- Young people failed by approach to mental health in secondary schools across England (Mind)
- Mentally Healthy Schools: Relationships and belonging (Anna Freud Centre for Children and Families)

**Brief 3**

How might we restore nature to urban spaces to ensure that people and the planet thrive together?

Some existing examples that might meet this brief include…

- **Nottinghamshire Wildlife Trust**: a proposal for reimagining the empty Broadmarsh shopping centre into an urban oasis of wetlands, woodlands, and wildflowers.
- **Parklets**: small parts of residential streets reclaimed by the community for people to stop, rest and enjoy
- **The Orchard Project**: a national charity dedicated to the creation, restoration, and celebration of community orchards

Further resources:

- 8 cities rewilding their urban spaces
- New research shows the need for urban green space
- Biophilic design: What is it?
Judging criteria

Your proposals will be evaluated based on the following criteria:

1. **Social and environmental impact:**
   - How does the proposal make a positive difference for people and/or the natural world?
   - How does the final proposal consider diverse needs and equitable ways to meet those needs?
   - How does the proposal engage with the local community in its chosen context?
   - How does the proposal consider using materials, processes, and resources in a sustainable way?

2. **Rigorous research and compelling insights:**
   - Has the pupil/team undertaken first-hand research by identifying the needs and motivations of people affected by the problem in your brief?
   - Has the pupil/team conducted research into the wider context of the problem on the internet or through reading material?
   - How does the proposal build on key insights grounded in people’s needs and motivations, and gained through wider research?
   - How does the proposal incorporate feedback and testing through prototyping and iteration?

3. **Viability:**
   - Has the pupil/team considered how the proposal will work in practice?
   - Has the pupil/team considered the cost of the proposal and how it might be funded and sustained?
   - Has the pupil/team identified any potential barriers that might prevent the proposal working in practice? How might these be overcome?
   - Has the pupil/team considered how they would measure the success of their proposal if it became a reality?

4. **Creativity and innovation:**
   - How is the proposal different from existing solutions? How might it be better or more useful?
   - What unexpected or surprising elements are included in the proposal? What value do these add to the idea?
How to submit your work

You may enter as a team or individually. To enter your work into the RSA Pupil Design Awards, you will need to present your proposal on six A3 boards. These six boards need to tell the story of your design thinking process from research to final idea. The judges will be looking for the story of how your design developed over time. When the judges first look at your work, you won’t be there to explain it, so your six boards need to do all the explaining for you!

The six boards:

1. Research
   - What design brief are you tackling?
   - What research have you done to investigate the challenge and understand how the people/environment are affected?
   - How did you conduct some primary research to understand the issue better?

2. Findings
   - What is the specific problem you are focusing on?
   - What were your key findings from your research?
   - What were your insights from your research?

3. Ideation
   - How have you explored potential ideas?
   - What ideas did you decide to explore further?
   - What was successful/unsuccessful about them?

4. Testing & Development
   - How did you test your idea?
   - Who did you ask for feedback?
   - How did you incorporate feedback into your proposal?

5. Impact
   - How could your proposal work in the real world?
   - What could be the challenges you might face when putting your proposal into the real world?
   - What positive impact will your proposal have?

6. Final Idea
   - Tell us about your final idea in one statement.
   - Who is your proposal aimed at and why?
   - What makes it different to existing solutions?
Judging Process

The Pupil Design Awards will be judged in three categories: Year 7&8, 9&10 and Year 12. All entries must be made via our website www.thersa.org/pda by your teacher or a guardian over 18. The final deadline for submissions is the 20 May - check our website for updates.

As you can see below, the judging process is divided into six stages. The panellists in the past have included Student Design Award alumni, Royal Designers for Industry, practising designers and RSA staff.

1: Final submission
- The final deadline for entries is the 20 May 2022.
- Submissions are evaluated per age group by a curated panel of judges.

2: Individual evaluation
- The judges mark all submissions for their age category individually using an online evaluation tool based on the judging criteria.

3: Judges shortlist deliberation
- The panel come together to deliberate, using the evaluation tool and the judging criteria, to shortlist a handful of projects per category to be shortlisted.
- The RSA team contacts all competition entrants to let them know whether or not they have been shortlisted.

4: Interviews with panel
- The shortlist are invited to an interview with the judges where they will have the opportunity to present their project to the judges in and answer a few questions from the judges based on the judging criteria.

5: Judges awards deliberation
- The judges mark all interviews using an evaluation tool and the judging criteria and then deliberate to select their winners.

6: Awards announcement
- The interviews are followed by an awards announcement and celebration!
Glossary

**Audience** - the people who your design proposal is aimed at. It’s almost impossible to come up with an idea that will be able to help everyone, so it’s often better to focus on a specific group of people with a specific problem and to design a proposal for them.

**Belonging** - the sense of being somewhere you are confident that you will fit in. It means you feel valued because of who you are and feel an affinity to a place as a result.

**Biodiversity** - The variety of all life on Earth. It includes all species of animals and plants – everything that is alive on our planet.

**Bio-energy** - renewable energy produced by living organisms.

**Biophilic design** - a concept used within the building industry to increase users’ connection to the natural environment with health, environmental, and economic benefits for both users and urban environments.

**Campaign** - a planned set of activities that people carry out over a period of time in order to achieve something such as social or political change.

**Circular economy** - a circular economy is based on the principles of designing out waste and pollution, keeping products and materials in use, and regenerating natural systems.

**Climate crisis** - a change in global or regional climate patterns, in particular a change apparent from the mid to late 20th century onwards and attributed largely to the increased levels of atmospheric carbon dioxide produced by the use of fossil fuels.

**Design thinking** - Design thinking is a process and a mindset used to tackle complex problems. It can help us explore new alternatives and to imagine and bring to life ideas that didn’t exist before.

**Exclusion** - not allowing someone or something to take part in an activity or to enter a place.

**Food insecurity** - the state of being without reliable access to a sufficient quantity of affordable, nutritious food.

**Food system** - a complex web of activities involving the production, processing, transport, and consumption of food.

**Food waste** - food that is fit for human consumption, but isn’t eaten either because it’s been left to go off or thrown away, is called food waste.

**Human centered design** - Human-centered design is an approach to problem solving, commonly used in design, that develops solutions to problems by involving the human perspective in all steps of the problem-solving process.

**Ideation** - the formation of ideas and concepts. As part of the design thinking process, ideation is the time to come up with as many ideas as possible before deciding which ones are the best ones to develop further.

**Insight** - an accurate and deep understanding of someone or something. This is the key bit of information or perspective you gained about the problem you are tackling that will help you decide how to address the problem and come up with ideas.

**Iteration** - a cyclic process of prototyping, testing, and refining your idea. Based on the results of testing the most recent iteration of a design, changes and refinements are made to improve it.

**Judging criteria** - are the set of guidelines that judges will follow when looking at your work so they can evaluate it in a fair and equal way, especially when comparing different projects.

**Mentor** - an experienced person who is there to support and advise you throughout your design journey, maybe helping to give you a different perspective or try out something you hadn’t thought of before.
**Natural ecosystem** – a community of organisms, where each component interacts together as a unit through biological, physical and chemical processes. A natural ecosystem is one that exists in nature, independent of any human involvement.

**Primary research** – research that you conduct for yourself, such as interviews or taking photographs of a space or situation, as opposed to consulting books or online research done by other people.

**Proposal** – A design proposal comes at the end of a project once you have completed your design journey, to summarise your idea and communicate it to others.

**Prototype** – the first, rough, working version of an idea which you can use to test and gather feedback to improve your idea.

**Reciprocal** – describes something existing, experienced, or done on both sides and in return. In regenerative design, it refers to the ways in which what we produce must give back to nature, instead of just taking from it.

**Royal Designers for Industry** – an award given by the RSA to designers who have had a significant impact on their field of work.

**Secondary research** – research that has been conducted by others but which you use to inform your work. This can be reading a book, an interview, researching online or looking at photographs someone else took and the work they did to inspire you.

**Service** – a number of interactions and/or objects and technologies which all come together to provide something to the user. For example, sending a letter in the post or ordering something online and getting it delivered are both services made up of different parts.

**Sustainability** – using resources in such a way that they will continue to be available in the future and have minimal impact on the environment.
The competition has been an amazing opportunity. I've gained so much, including the experience of being interviewed which will help me in the future.

**Finalist, Pupil Design Awards**