RSA

Pupil Design Awards

SUBMISSION HANDBOOK

Contents:

About the RSA Pupil Design Awards

This handbook includes <u>tips and tricks</u> to help you craft an impactful and memorable submission.

How to take part
Pupils can take part as a group or individually. There are three age group categories:

→ Years 7 & 8
→ Years 9 & 10
→ Years 11, 12 & 13

Pupils can submit their proposals in a group or as individuals. We encourage groups of no more than five pupils.

There is no entry fee to submit to the RSA Pupil Design Awards.

The judging process
Pupils proposals are reviewed and evaluated by expert reviewers based on brief and age category and against our evaluation criteria. Expert reviewers in the past have included Student Design Award alumni, Royal Designers for Industry, practising designers and RSA staff.

Showcase your unique style
You have complete creative freedom on the layout, style and design of your boards and this is a great opportunity to showcase your own original style.

Further links

→ RSA Pupil Design Awards

→ Evaluation criteria

→ Useful resources

Please note: all boards presented in this document are examples only of the work made by past RSA Pupil Design Awards participants. You are not expected to replicate their style.

Evaluation criteria

Pupils' proposals will be evaluated based on the following evaluation 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?

Further links

→ Download all of this year's open briefs

→ View teacher training resources

→ View gallery of work from Pupil Design Award winners

3

Submission requirements

Pupils' are required to submit
one document with six pages:

Page 1:

Research board:

- 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?

Page 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?

Page 3:

Ideation:

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

Page 4:

Testing and development:

- How did you test your idea?
- Who did you ask for feedback?
- How did you incorporate feedback into your proposal?

Page 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?

Page 6:

Final idea:

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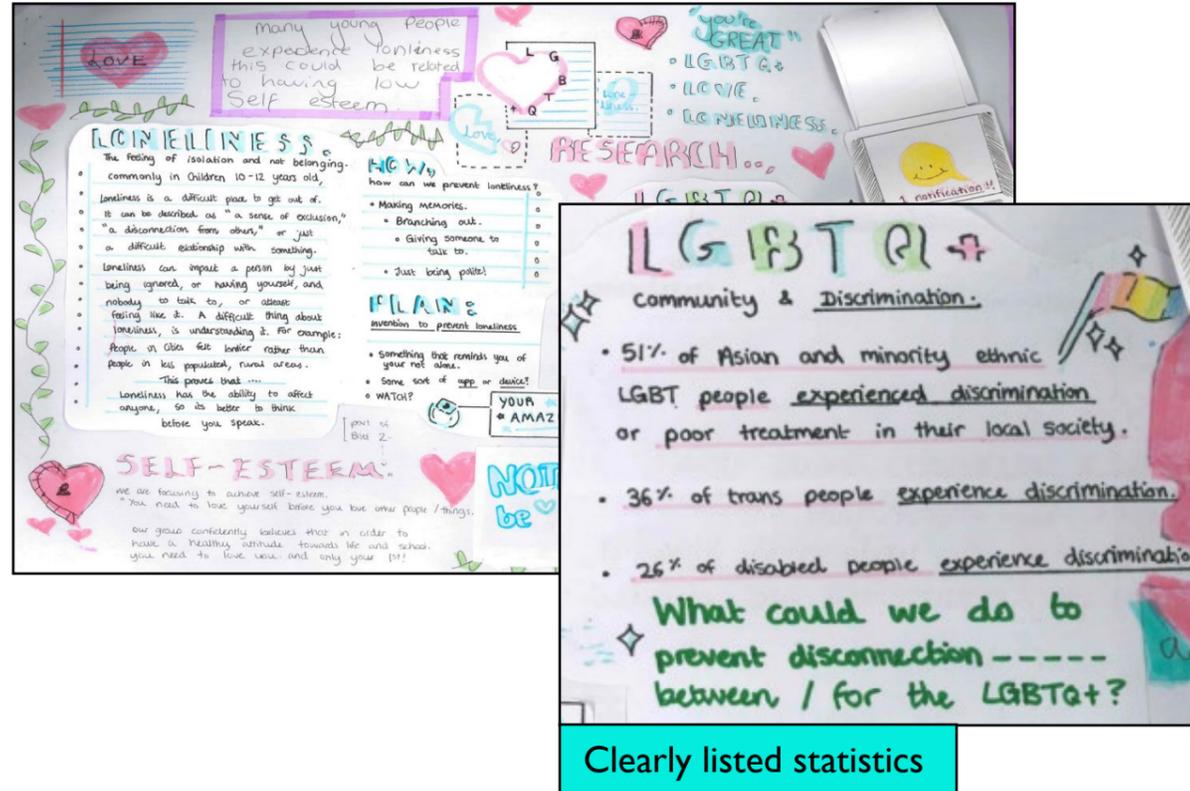- What makes it different to existing solutions?

Examples

Page 1: Research board

Happiness co.
A watch that helps your display and track your emotions.

Year 7+8
4 students shortlisted for **Learning to belong** 2021/22 brief.
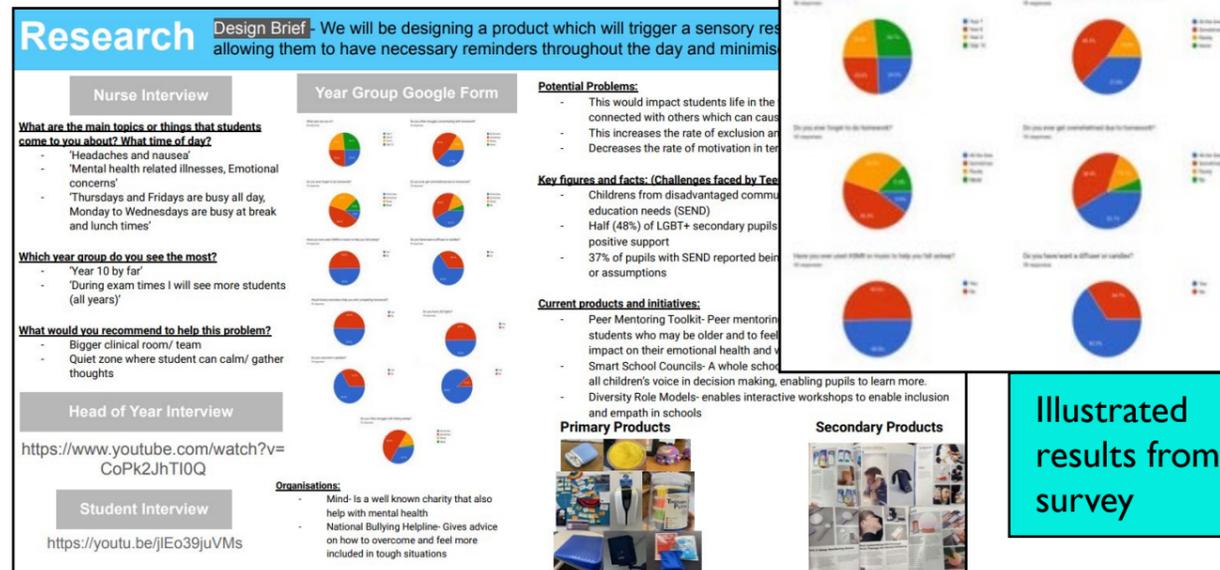

Clearly listed statistics

Aura
A product for students that triggers a sensory response to focus minds and calm senses.

Year 9+10
4 students shortlisted for **Learning to belong** 2021/22 brief.

Illustrated results from survey

Research board:

- 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?

Tips:

Make your research question clear, what is the problem that you are trying to solve?

This stage requires time to discover and understand a new subject, which is an exciting opportunity to broaden your mind.

Examples
Page 2: Findings

Hydraseed
A drink container that naturally biodegrades/decomposes with integrated seeds related to the drink flavour.

Year 9+10
3 students commended for **All being well** 2022/23 brief.

Key findings from google form

- **78.5%** of people who filled out our form drink **less than 1.2 litres** of water a day which is **below** the recommended daily intake of water given by the NHS.
- Moreover, **78.8%** of people we asked didn't think that they drank enough water which shows that they may be **aware** of the problem.
- **43.8%** of people who filled out our form use **plastic bottles**. This displays a potential target audience.

Key findings from online research

Findings

What specific problems are we focusing on?

We are focusing on **hydration**, the **environment** and **stress management**.

Findings from online research

- Being properly hydrated is essential for good health and wellbeing
- A large percentage of the UK population aren't drinking the daily recommended amount of water.
- Stress can lead to physical and emotional problems.
- Gardening is an effective way with dealing with stress.
- Large amount of plastic bottles used a year means that a lot of these bottles become litter which is a problem.

How often are you stressed?
79 responses

- Always
- Often
- Sometimes
- Rarely
- Never

62.8%

26.9%
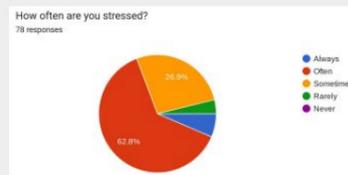
62.8% of people who filled out our form feel stressed often.

Key findings from google form

- **78.5%** of people who filled out our form drink **less than 1.2 litres** of water a day which is **below** the recommended daily intake of water given by the NHS.
- Moreover, **78.8%** of people we asked didn't think that they drank enough water which shows that they may be **aware** of the problem.
- **43.8%** of people who filled out our form use **plastic bottles**. This displays a potential target audience.

Good features from existing products

- The fun aspect of the air up bottles helped to encourage hydration.
- The peloton bike and the lettuce grow farm stand both improved accessibility by providing easier access due to space and location.

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?

Tips:

What's the specific problem you are focusing on?

Make your focus and interpretation of the briefs clear to the judges.

Examples
Page 3: Ideation

Food waste pop-up book
A pop-up book for children designed to educate them on food waste and the importance of growing their own food.

Year 11,12+13
1 student commended for
Food for thought 2021/22 brief.
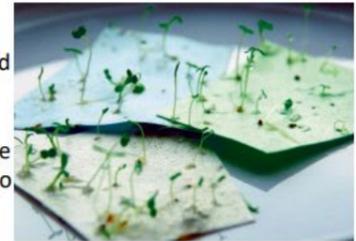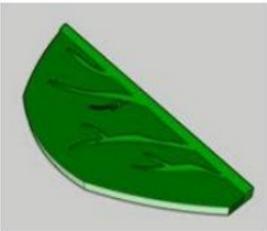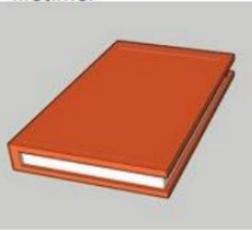
Idea exploration

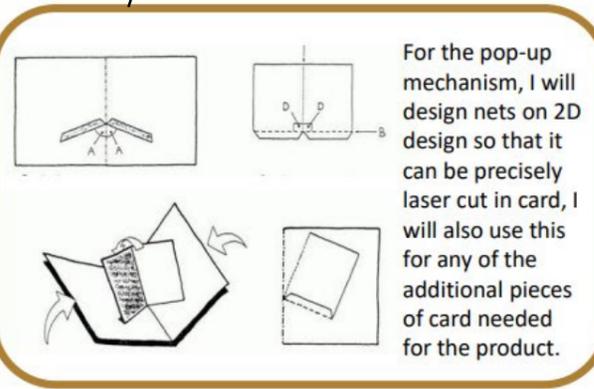Detailed plans for designing product

Ideation:

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

Tips:

Communicate your creative idea and consider the best layout for this: we recommend avoiding large blocks of text, consider showing your ideas through drawing, photography, 3d models and graphs, etc.

This may be the most time-consuming stage as it's important to keep testing and be open to your idea changing.

Examples
Page 4: Testing and development

Food waste pop-up book
A pop-up book for children designed to educate them on food waste and the importance of growing their own food.
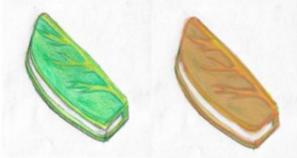
Year 11,12+13
1 student commended for **Food for thought** 2021/22 brief.

Would this be a product you would use with your child?
"yes, I think it easily encourages food sustainability and would engage my daughter and has a cute concept"

Interviews with users inform development

Aura
A product for students that triggers a sensory response to focus minds and calm senses.
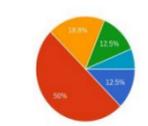
Year 9+10
4 students shortlisted for **Learning to belong** 2021/22 brief.

Survey conducted to collect feedback

We released a survey with the ideas that we have come up with and majority enjoyed design 1 due to its diffuser feature which is quite in trend. Many people also said that it was quite practical due to it being portable. However some features to improve on was to make it more a minimalist look with less features because it might not fit to everyone's taste.

Examples
Page 5: Impact

Powering people
A way to bring the community together while promoting green energy and saving the planet

Year 11,12+13
1 student commended for **Powering people** 2021/22 brief.

Awareness and detailed explanation of wider impact of solution

Powering people - Impact

Impact on the community

I feel as though this will have many impacts in a community. To start I feel as though it will bring people of all ages closer together, this is both due to the place it is a shared space where many people will congregate and the shape of the roof and table are both circular which has been proven to encourage conversation and strengthen bonds between people. This is why many functions for people in rehab sit in circles, and the olympics logo are rings to show unity of nations

Impact on the environment

This is a green building so will have little to no emissions in the forms of CFCs which damage the ozone. I am planning for the supports to use FSC wood which means that any tree that is cut down is planted in a safe and protected location as not to damage the environment. This is also the same for the roof as I am planning to use wooden planks supported by steel beams. Steel can be recycled and reused endlessly without compromising its impressive physical properties.
This means that the only downside to the environment is transporting materials as there are alot of them and I am planning on building in a remote village.

Wider impacts

There are a few wider impacts, notability setting a trend and encouraging other communities in the local area to convert to green energy.
By building this building it may cause others to copy the idea and start thinking more about their community spaces and their impacts on the environment, if this trend continues there will be a massive increase in green energy around the world which may prove to be critical for our planet in the future.

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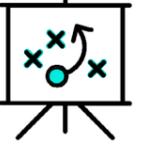
- How could your proposal work in the real world?
- What could be the challenges you might face when putting your proposal into the real world?
- What positive impact will your proposal have?

Tips:

Clearly show the positive potential of your creative solution; what impact would your idea have in the world for real people?

Examples
Page 6: Final idea

Food waste pop-up book
A pop-up book for children designed to educate them on food waste and the importance of growing their own food.

Year 11,12+13
1 student commended for
Food for thought 2021/22 brief.

Detailed use of materials

Physical prototype made from paper

Pop-up Book Final Idea

Materials

I would use **solid white board** for the cover as it is strong, high quality and good for printing although, I could also use this card for the inner pages as they need to be sturdy for the pop-up book to work however, I am going to instead use a **seeded card** paper (like seeded card used in birthday card production) to ensure that once the client has no more use for the book it would be mostly decomposable and reusable, giving the product a new lifespan by becoming produce.

I would use **Jelly glue (protein glue)** as it is 100% non-toxic, recyclable, and decomposable, making it one of the most environmentally-friendly adhesives available to use in manufacturing.

For the miniature plant pot, I would make it out of a **recycled cardboard and paper combination** so that it is decomposable and recyclable like the rest of the book.
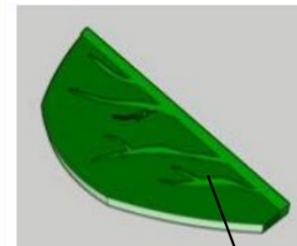
My final design solution is an interactive pop-up book, that will contain a story that encourages, excites and educates kids on the importance of not wasting food.
It will come with a compressed soil tablet, a buildable net of a decomposable pot, instructions on how to grow different fruits and vegetables, a vegetable seedling package and seeds embedded in the pages.
Not only will this product be 100% recyclable it is multipurposed so that when the client is finished with the book, it will not be thrown away and wasted; it will grow into food they can use, this will create a new experience for many families.
This product will tackle the problem in the long-term and short-term, this is as younger generations are easily impressionable and after getting into a routine at a young age will most likely continue these routines and habits later in life.

Computer model prototype

Tips:

Consider presenting your work and receiving feedback on your submission boards from people unfamiliar with your idea.

Do other people understand your project solution from reading your submission boards?

Is your project clear in words and visuals?

Examples

Page 6: Final idea

Aura
A product for students that triggers a sensory response to focus minds and calm senses.

Year 9+10
4 students shortlisted for **Learning to belong** 2021/22 brief.

Physical prototype made from cardboard

Clear understanding of uniqueness of product

Final Idea

Design Brief - We will be designing a product which will trigger a sensory response from the user, allowing them to have necessary reminders throughout the day and minimise anxiety.

What makes it different to existing product

This product is quite different from other existing products due to the fact it incorporates three of the senses which can help different parts of the body to relax. By smelling the diffuser it can help people sleep better which can relieve stress as it is a common factor to anxiety. Through the visuals of the alarm you would be able to allocate time limits to different tasks to improve prioritising and to prevent procrastinating. Through the auditory senses the user is able to submerge themselves into feeling more into their ideal environment to concentrate more.

This product allows the user to be in control of their own schedule which is quite a different solution to the common stress balls and etc. This minimises touching with the product to help the user feel more inclined to feel and be productive which in the end will help them feel less stressed due to the workload being tackled. This was done through their own schedule which is an important skill to have for the future which is time management. This product helps the user find their own strategy to conquer any tasks that need to be done without being too harsh and more gentle. It is also portable therefore it can be taken to school or anywhere else to help implement it into their lifestyle. By it being portable it differs to other products which are less likely to be carried everywhere due to it being messy such as the slime or just not carrible therefore this product is unique in being portale and calming whilst having a fulfilling feeling once used.

Aura Pod- Focus your mind, Calm your senses
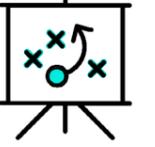
Who is the product aimed at and why?
This product is aimed at students as from our collected data we have noticed that year 10 can be on of the most overwhelming year due to the change in workload therefore by having an alarm it can differentiate time between each individual tasks to ensure the same amount of focus is being place to ensure maximum efficiency and quality. This helps feel more at ease with school due to tasks being completed which will help the user feel more relieved and distressed. Many year 10's may feel that they lack in structure within their day which contributes to the factor that lots of work is being piled upon each other once again the common cause of stress. Therefore this product is targeted for students especially from year 9 and above however it can be used by workers.
How can it be developed further?
The product can be developed by making it more smaller . By doing this the product would become more versatile as the user would be able to customise and store it anywhere. It would also be produced more environmentally friendly to make it more sustainable.

Identified target audience

Examples

Page 6: Final idea

Powering people
A way to bring the community together while promoting green energy and saving the planet

Year 11,12+13
1 student commended for **Powering people** 2021/22 brief.

Identified target audience and benefits

Photography used to show project visuals

Final Project

▶ Our Final project is that we want to have renewable energy resources displayed around cities in artistic ways. The project would be a joint design by engineers, town planners and artists.

▶ This will brighten places around cities and also help the planet with helping places in cities adjust to not using fossil fuels.

▶ It will make cities less polluted and help have clear air.

▶ It will be a great investment for councils which will help pay for their electricity bills with the inflation. It will be a great investment and it will be useful to power council buildings, as well as reaching decarbonisation targets.
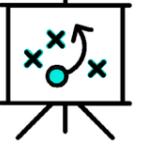
Final idea:

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

Tips:

Consider presenting your work and receiving feedback on your submission boards from people unfamiliar with your idea.

Do other people understand your project solution from reading your submission boards?

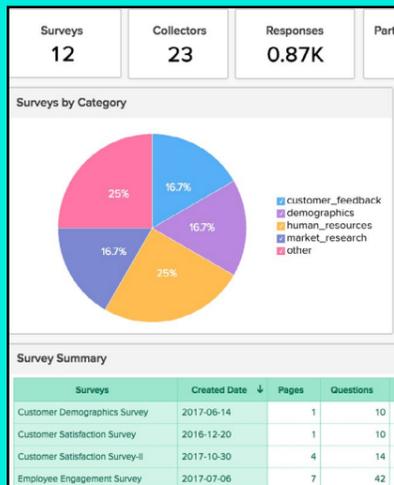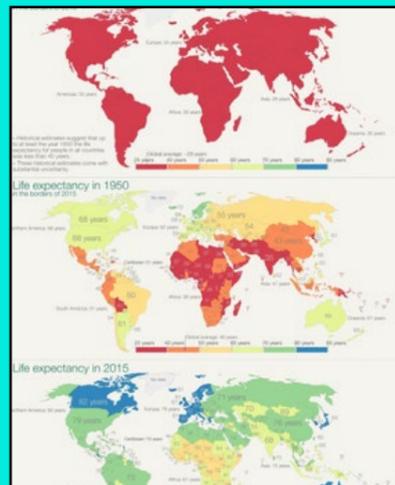Is your project clear in words and visuals?

Resources

Mentoring

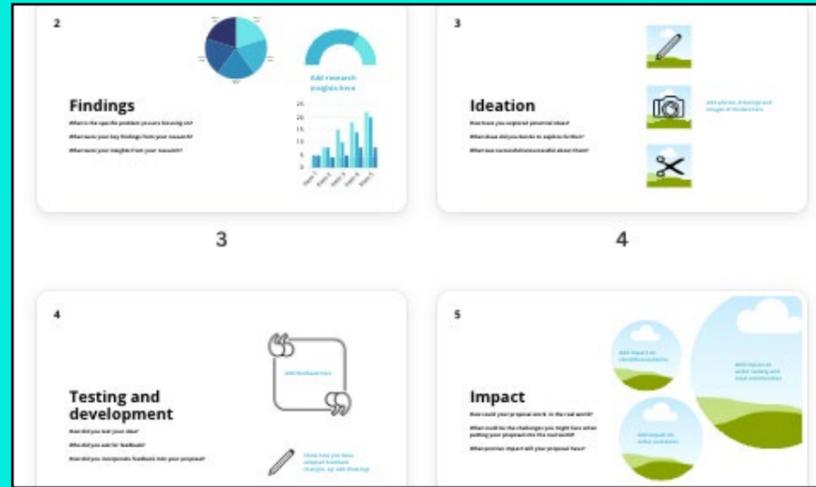Get in contact with the team to receive free RSA mentoring support for pupils working on briefs.

Submission board template

Use the submission board template document made on Canva to help compose the story of your brief work.

Research tools

Make your own data collection tools on Survey Monkey.

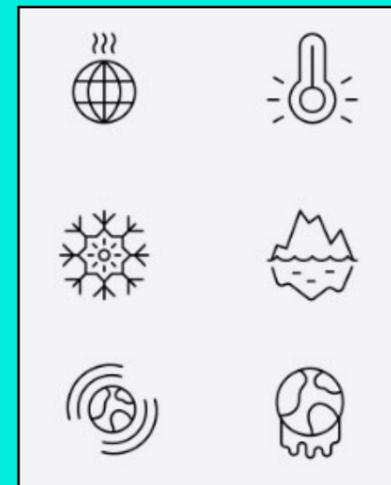Collect data and search topics by theme on Our World in Data.

Creative tools

Access free photography on Pexels.

Access free visual icons on Noun Project.

Need more help?

The Pupil Design Awards team are keen to break down barriers that might prevent you or your pupils participating or entering the competition. Please get in touch by email so we can assist you further: pupildesignawards@rsa.org.uk

RSA

Pupil Design Awards

Submissions open for entries in March and close in April.
Find out more about the RSA Pupil Design Awards
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development → Subscribe to our newsletter

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RSA, Pupil Design Awards
8 John Adam Street,
London, WC2N 6EZ