



# GENERATION EARTHSHOT

## TEACHER'S GUIDE

### Thank you for being a part of Generation Earthshot!

This guide will provide you with the knowledge to help students join in with the mission of The Earthshot Prize: to discover the best solutions to help repair our planet.

Taking inspiration from The Earthshot Prize winners, we can nurture the innate creativity of young people and channel it towards solving our biggest environmental challenges, building optimism and confidence in their ability to change the world for the better.

What?	Who?	Where?	When?	How?
A teacher toolkit with instructions and worksheets to help students learn how to solve environmental problems creatively.	For educators of students aged 10+ who would like to come up with ideas to repair our planet.	In schools and other educational settings, all over the world. These resources are available in multiple languages.	You can take part all year round. The Earthshot Prize Awards will be broadcast globally once a year.	Download the toolkit and use it to run purposeful ideas and problem-solving activities across many curriculum areas.

### The toolkit

This consists of downloadable guides to each step in the Generation Earthshot process and worksheets to aid students in organising their ideas. There are 4 stages in the process:

Stage	Objective	Resources
<b>Introduce The Earthshot Prize and Generation Earthshot</b>	Share the idea of the Earthshot Prize with students and excite them about joining in.	Generation Earthshot 2-minute video Assembly Slide Pack
<b>The Problem Stage</b>	Discover the Earthshots and help students in defining the problem they wish to solve.	Teacher Guide 5 Earthshot videos 2 x worksheets
<b>The Ideas Stage</b>	Help students generate ideas in an organised way, then evaluate and refine them.	Teacher guide 5 x idea-generating activities 2 x worksheets
<b>The Solutions Stage</b>	Students take on roles, present ideas and share them with others. Students then reflect and identify their next steps.	Teacher Guide 5 x role-based activities 5 x worksheets



## QUESTIONS/ANSWERS

### How long does it take?

The framework is flexible, so all 4 stages can be completed within 1 hour. This is known as a “sprint” as each stage is facilitated quickly. Students are left feeling energised and hopeful that solutions to repair our planet are possible, and that they can contribute.

If you have more time, you can devote a full lesson or more to each stage. In the guide to each stage there are suggestions for how to extend and go deeper into the activities.

When you have finished, don't forget to share your work via the Generation Earthshot website and by using the hashtag #GenerationEarthshot on social media!

### What is the Earthshot Prize?

The Earthshot Prize is the most ambitious and prestigious of its kind – designed to incentivise change and help to repair our planet over the next ten years. Five one million-pound prizes will be awarded each year for the next ten years, providing at least 50 solutions to the world's greatest environmental problems by 2030.

### What is an 'Earthshot' and where does it come from?

The word 'Earthshot' takes inspiration from U.S. President John F. Kennedy's Moonshot, which united millions of people around an organising goal to put man on the moon. The Earthshot Prize is centred around five 'Earthshots' – simple but ambitious goals for our planet focusing on nature, air, oceans, waste and climate.

You can watch a full explanation of it here:

<https://www.youtube.com/watch?v=bymiMNa6QJk&t=54s>

### What is Generation Earthshot?

Generation Earthshot has been created to enable children aged 10-15 to engage with the idea of The Earthshot Prize more deeply. It provides teachers with a downloadable toolkit to help inspire students everywhere to develop big ideas to tackle five Earthshot goals.

Children and young people are aware of the urgency of our environmental challenges but can become overwhelmed. Through Generation Earthshot, we want to inspire optimism that we can overcome these great challenges.

At the heart of the toolkit is a framework for creative problem solving and ideation (the process of forming ideas), and the opportunity to share ideas with others. The framework takes its lead from the principles of design thinking, which have been simplified to be more



widely accessible. No specialist teaching experience is necessary, and the principles can be applied throughout different areas of the curriculum, from science and humanities to arts.

Learning about ideation and creative problem solving is hugely important but often overlooked. They will be key workplace skills in the future and can be nurtured in every student and classroom regardless of the resources available.

### **What is the value of this learning?**

One of the world's most popular educationalists, the late Sir Ken Robinson, said:

*"We're all born with immense, natural, creative abilities. Children demonstrate them all. We all feel them. But we feel they slip away from us as we get older"*

A recent study conducted in 2018 by Dr George Land and Beth Jarman on behalf of NASA endorsed this empirically. Their study of 1,600 children found that:

*When children aged 5 were given a problem with which they had to come up with an imaginative, and innovative solution, 98 percent of 5-year-olds tested at the "genius" level. The same problem given to 15 year olds indicated only 12% of students tested at the "genius" level and by adulthood that number falls to just 2%.*

They concluded:

*"Traditional education does not sufficiently value innovative and entrepreneurial thinking – our system even dumbs down the creative genius that we were born with".*

Reflecting on education systems the World Economic Forum has claimed that

*"There is a deep mismatch between the skills our education systems nurture and the needs of society."*

But what are those needs? As Prince William introduced the Earthshot Prize he described that:

*"The Earth is at a tipping point and we face a stark choice: either we continue as we are and irreparably damage our planet, or we remember our unique power as human beings and our continual ability to lead, innovate and problem-solve"*

As a teacher you can help young people respond to the challenges set out by The Earthshot Prize by helping nurture student creative genius. Using the Generation Earthshot toolkit will get you started.



### How can I get the most from this learning experience with my students?

To get the most out of Generation Earthshot we encourage you to think of yourself as a facilitator. You are helping students learn new skills, and in idea generation there is no such thing as a wrong answer. Try to hold yourself back and be tolerant of unconventional answers. Allow for occasional disruptions or detours of curiosity. Actively encourage questions because they help start different conversations. In doing so you will unleash more ideas that will surprise you and your students. You can find out more about running effective idea generation sessions in 'The Ideas Stage: Teacher Guide'.

You may also find that students are concerned about the implication of the Earthshots. This is only natural, and you may need to make time to acknowledge this, so that students realise they are not alone. Using the Generation Earthshot framework will help you respond to these concerns. For example, in 'The Problems Stage' when students are localising the problem, you will help them feel more connected to the issues. In the 'Ideas Stage' when students are working together to generate ideas, the collaboration, volume of ideas and their potential will build hope rather than fear.

And finally - if you are looking for more inspiration at any time, **take students outside**. Encourage students to look for solutions in nature that they can apply to other problems. They will feel more empathy with their natural world and appreciate what it brings us.



### Is Generation Earthshot a competition? How can I reward my students?

Generation Earthshot is not currently a competition, but we do appreciate the work that your students do and would love to see it. They can submit it via the Generation Earthshot website and will receive a certificate and letter of thanks from The Earthshot Prize. There will be opportunities for student ideas to be showcased, so if anyone is looking for inspiration they can see what their peers have been doing across the world.





## What else could I do?

Once you have completed the framework you can start again using a different Earthshot as the starting point and students can take on a different role to showcase solutions. In this way there are 25 different pathways through the framework. Students will become experts at generating ideas very quickly!

At the end of every cycle ask students to reflect on their learning and acknowledge how far they have come. You can ask them:

- What they enjoyed most and what they would do differently next time.
- How do they feel about the ideas generated? What has surprised them?
- What would they like to do next?

If an idea really captures students' imaginations, they could really bring it to life by setting up a project team, building an action plan and getting started. Is it something your whole school could get involved with? What about the wider community? Could you raise awareness and work with local people to help the idea go further? Could you contact local organisations or the government and ask them to support? Think big and brilliant things can happen!



Whatever they do, we'd love to see your students work. Please share it with us via the Generation Earthshot website and by using the hashtag #GenerationEarthshot on social media.

And don't forget to encourage students to watch the annual Earthshot Prize awards! You can find out how to do this at [earthshotprize.org](https://earthshotprize.org). Host a watch party at school or encourage students to discuss the winning ideas they liked most.

All the winners will have started their journey with an idea, so encourage students to believe that one day they could be a winner too!