

# Team Champions Pack

## Welcome to the Amazon Longitude Explorer Prize

Welcome to the Amazon Longitude Explore Prize - developed by Nesta to enable students aged 11-16 to bring together the power of satellite technology and their imagination to come up with new and exciting ideas to help shape our lives for the better. Nesta is the UK's Innovation foundation whose mission is to help people and organisations bring great ideas to life.

The Amazon Longitude Explorer Prize is a UK-wide competition for 11-16 year olds, designed to encourage young people to imagine new and exciting ways to tackle pressing societal issues using technology to help shape our lives for the better.

The Prize is run by [Nesta Challenges](#), which exists to design and run challenge prizes that help solve pressing problems that lack solutions. Nesta is the UK's innovation foundation whose mission is to help people and organisations bring great ideas to life.

Longitude Explorer is supported by [Amazon](#), and we are calling on 11-16 year olds across the UK to take part in our 2020 programme and develop new skills, experience a hands-on STEM and entrepreneurship opportunity and have the chance to win £20,000 for their school or youth group. The prize is completely free to take part in; read more about how teams are supported throughout the prize on our website.



In this pack is designed to provide adults supporting applicants with all the information needed to enter the Prize, there is also a downloadable version on our website. If you have any further questions please check our FAQs or email us at [explorer@nesta.org.uk](mailto:explorer@nesta.org.uk).

### What you will find in this pack:

- The aim and objective of The Challenge
- Timeline of the Amazon Longitude Explorer Prize
- Supporting resources and lesson plans available to you
- How to make an application
- Judging criteria
- Key curriculum links to the Prize content

## Aim

The Prize has been developed by Nesta Challenges to stimulate young people's entrepreneurial skills and show how they have the power to create impactful solutions by applying STEM (science, technology, engineering and maths) knowledge to address some of the world's biggest issues. The Prize has had a proven impact on young people taking part, with past participants reporting an increase in communication, team work, remote working and interest/confidence in STEM.

## The Challenge

*How can you use technology to create an app, product or service that will make the world a better place, enabling people to **Live Better, Live Longer, Live Greener and Live Together**?*

## The Themes



### Living Longer:

Because of breakthroughs in medicine and better healthcare. We are living longer than ever. But as we get older, our needs change. What can technology do to meet the needs of an ageing society?



### Living Better:

There is huge potential in how technology can help us live healthier and happier lives. How can we use technology to help us catch illnesses earlier and recover more quickly, help us stay happy and healthy in our day to day lives, and improve the lives of others?



### Living Greener:

It is becoming increasingly important to transform the way we live to reduce our negative impacts on the environment. How can we use technology to help protect our planet?



### Living Together:

We are presented with more and more options that can help us move about, access vital services and supplies and stay connected to each other. How can we use technology to help us live together and stay connected in a way that is easy, safe and environmentally friendly?

## Stages of the Prize



### Entry period (early November 2020 - 12th of February 2021)

Teams are invited to make an application to the Prize. Support and resources are available to support teams to complete their applications and the process has been made as simple as possible. More detail on the support provided below. .



### Finalist stage (April - June)

Finalist teams will be supported to develop their ideas into reality through the provision of hardware and being matched with expert mentors to help them develop their business case and prototype. Finalists will also be invited to an exclusive business school experience (either online or in person depending on the public health conditions in May 2021), where they will have the chance to explore essential business topics.



### Awards & Prizes (July)

The Prize will end with finalist teams pitching to an expert panel of judges in July 2021. Here, finalist teams will have the chance to develop a professional pitch with the help of their mentor, and demonstrate the progress they have made in turning their idea into a reality.

The winners will be awarded £20,000 for their school or youth group and connections to further develop their ideas. There will be three runners up prizes of £5,000 each and a people's choice award of £5,000. Please note: that prizes will be provided in the form of grants that will be entered into between the winning school/youth group and Nesta.

## What support or resources are available to support teams to make an application?

**Introduction to the Amazon Longitude Explorer presentation:** This is a powerpoint presentation which has been designed to be delivered to groups of young people in a group session/assembly/class to introduce them to the prize. The presentation covers topics such as why they should take part and this year's themes.

**Lesson plans and supporting materials:** These are lesson plans and informational materials that can be used to support your class or group to come up with ideas for their application. Each has facilitator notes, a powerpoint presentation, a worksheet and recommended supporting materials. You do not need to use all of the resources to make an application - pick and choose what you think is most suitable for your group.

**Supporting webinars:** We will hold webinars in November and January for interested schools and groups to attend to find out more about the prize and an opportunity to ask questions. See our website or sign up to our newsletter to receive the latest updates on this.

**General resources:** The website hosts a wide range of resources on STEM and enterprise but will also continue to be updated with new content throughout the prize.

**Get in touch:** Longitude Explorer team on-hand to support and answer your questions at [explorer@nesta.org.uk](mailto:explorer@nesta.org.uk)

**FAQs:** A detailed document on the website with some of the most common questions about the prize.

## How to make your application

Applications are made online and the secure platform can be accessed through the Prize website. The form has been made as simple as possible and consists of 3 key sections:

- Part 1 - Your details (who we contact about the application) - to be completed by the Team Champion
- Part 2 - Your Idea (this can be filled out by the team themselves)
- Part 3 - Evaluation (some questions to help us to continue to improve the prize) - to be completed by the Team Champion

Teams must be represented by an adult as a guardian throughout the challenge prize, known as the Team Champion, and so these guardians must submit the application on behalf of the team.

However we really encourage young people to take ownership of their ideas and answers. Teams are able to work on a downloadable version of the form available on the website before the final submission.

We also really encourage multiple submissions from schools, groups and classes as the ideation sessions make great activities for whole classrooms/year group bubbles. There is no limit to how many submissions you can make as long as they meet the eligibility criteria!

**Please note:** the final application form needs to be submitted online so you must register on the platform. The platform's requirements mean that only one application can be worked on at once per login, so we encourage teams to use the offline form first to avoid losing work. Once you have submitted an application, you are able to submit the next application.

## How will applications be judged at the entry stage

Applications will be assessed against the judging criteria below, and the 40 finalist teams will be selected by a judging panel of experts. The judging panel will be announced on our website.

<b>1. Innovative use of technology</b>	<input type="checkbox"/> Is your project an innovative idea that uses technology for good in a new way?
<b>2. Impact</b>	<input type="checkbox"/> Have you clearly explained the problem you are trying to solve? <input type="checkbox"/> Can you show how your idea will help to solve it?
<b>3. Enterprising</b>	<input type="checkbox"/> Are you able to explain clearly the steps you would take to turn your idea into a reality? <input type="checkbox"/> Do you know what you need to do to make or build your tech product or service?
<b>4. Teamwork</b>	<input type="checkbox"/> Were you able to work together as a team? <input type="checkbox"/> Were the contributions and strengths of all team members recognized?
<b>5. Communications</b>	<input type="checkbox"/> Do you have a clear plan for marketing and promoting your idea to your target audience?
<b>6. Ethics and Security</b>	<input type="checkbox"/> Have you thought through the ethical and security impacts of your idea and how you would make your idea safe?

Further detail on the full judging criteria at later stages can be found on the prize website:

<https://longitudeexplorer.challenges.org/>

## Summary

### Entry period (Early November - 12th of February)

Who can enter?	What do I need to do in this stage?	When do I need to submit
<ul style="list-style-type: none"> <li>Any constituted secondary school or youth group based in the UK. Primary schools are not eligible to enter.</li> <li>All team members must be between 11-16 years old at the time of submissions closing (12 February 2021).</li> <li>Teams must be made up of 2-5 young people.</li> <li>Teams must be represented by an adult as a guardian throughout the challenge prize, known as the Team Champion.</li> <li>Schools/groups can enter more than one team into the competition.</li> </ul>	<ul style="list-style-type: none"> <li>Support your team/s to submit their idea through the online application form on what they would use technology for good, within the 4 themes.</li> </ul>	<ul style="list-style-type: none"> <li><b>12th of February 2021!</b></li> </ul>

### Finalist stage (April - June)

What do I need to do in this stage?	When do I need to submit
<ul style="list-style-type: none"> <li>40 teams will be selected by an expert panel of judges and informed in March 2021.</li> <li>Teams and their Team Champions will then be invited to participate in an exclusive business school experience (either online or in person depending on the public health conditions in May 2021), where they will have the chance to explore essential business topics to help develop their business plan and make their idea a reality.</li> <li>Teams will be matched with an expert mentor and provided with hardware to help develop their idea</li> <li>Finalists will be invited to pitch to our expert panel of judges.</li> </ul>	<ul style="list-style-type: none"> <li><b>June 2021 (deadline to be confirmed closer to time)</b></li> </ul>

## Awards & Prizes (July)

What do I need to do in this stage?	When do I need to submit
<ul style="list-style-type: none"> <li>The winners will be awarded funds (£20,000) and connections to further develop their ideas. There will be three runners up prizes of £5,000 each.</li> <li>There will also be a 'People Choice' Award supporting teams to run their own publicity plans, and engaging the public to vote for the finalists' ideas.</li> </ul>	<ul style="list-style-type: none"> <li>N/A</li> </ul>

## Key curriculum areas that can be linked to the Prize

There are areas of the curriculum that are supported by participation in the Prize no matter the team's idea or chosen theme, these are linked to and summarized below.

Learning across the curriculum is also supported, as the specific idea and Prize theme chosen mean that additional areas of the curriculum can be explored e.g. wellness / wellbeing, environment, geography, biology, robotics, etc.

<a href="#">England National curriculum</a>	<a href="#">Scotland Curriculum of Excellence</a>	<a href="#">Curriculum for Wales Welsh Baccalaureate</a>	<a href="#">Northern Ireland Curriculum</a>
<ul style="list-style-type: none"> <li>Science</li> <li>Computing</li> <li>Design &amp; Technology</li> <li>Citizenship</li> </ul>	<ul style="list-style-type: none"> <li>Technology</li> <li>Sciences</li> <li>Social Studies</li> </ul>	<ul style="list-style-type: none"> <li><a href="#">Design and technology</a></li> <li><a href="#">ICT</a></li> <li><a href="#">Science</a></li> <li><a href="#">Education for Sustainable Development and Global Citizenship</a></li> </ul>	<ul style="list-style-type: none"> <li>Science and technology</li> <li>Environment and Society</li> <li>Learning for life and work</li> </ul>

Prize phase	Age Group	Key curriculum links
At all prize stages	All ages	<p>Key skills are used throughout the prize that are common across curriculum subjects</p> <ul style="list-style-type: none"> <li>Problem solving and critical thinking</li> <li>Working with others, able to plan and persist in tasks</li> <li>Communicating effectively in oral, visual and written formats, including a range of graphic media and ICT, showing a clear awareness of audiences</li> </ul>

<p><b>Entry (creating an idea)</b></p> <ul style="list-style-type: none"> <li>- Idea generation</li> <li>- User-centered design</li> <li>- Working as a group</li> <li>- Research</li> <li>- Preparing and submitting and entry (project work)</li> </ul>	<p>11 - 14</p>	<ul style="list-style-type: none"> <li>• I can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems (England KS3&amp;4 Computing)</li> <li>• Undertake creative projects that involve selecting, using, and combining multiple applications, preferably across a range of devices, to achieve challenging goals, including collecting and analysing data and meeting the needs of known users create, re-use, revise and re-purpose digital artefacts for a given audience, with attention to trustworthiness, design and usability (England KS3&amp;4 Computing)</li> <li>• Demonstrate creativity and initiative when developing ideas and following them through (Northern Ireland, Learning for life &amp; work)</li> <li>• I can use my knowledge of current social, political or economic issues to interpret evidence and present an informed view (Scotland SOC 3-15a)</li> <li>• identify and use appropriate sources of information to help generate and develop their ideas for products and be creative and innovative in their thinking when generating ideas for their products (Wales, technology &amp; design)</li> <li>• ask questions and develop a line of enquiry based on observations of the real world, alongside prior knowledge and experience (England KS3 Science)</li> <li>• use research and exploration, such as the study of different cultures, to identify and understand user needs (England KS3&amp;4 Design and technology)</li> <li>• identify and solve their own design problems and understand how to reformulate problems given to them (England KS3&amp;4 Design and technology)</li> <li>• use a variety of approaches [for example, biomimicry and user-centred design], to generate creative ideas and avoid stereotypical response (England KS3&amp;4 Design and technology)</li> <li>• investigate new and emerging technologies (England KS3&amp;4 Design and technology)</li> </ul>
	<p>14-16</p>	<ul style="list-style-type: none"> <li>• Having selected scientific themes of topical interest, I can critically analyse the issues, and use relevant information to develop an informed argument (<i>Scotland, SCN 4-20b</i>)</li> <li>• develop their capability, creativity and knowledge in computer science, digital media and information technology (<i>England KS4 Computing</i>)</li> <li>• develop and apply their analytic, problem-solving, design, and computational thinking skills (<i>England KS4 Computing</i>)</li> </ul>

<ul style="list-style-type: none"> <li>- <b>During Prize (developing an idea)</b></li> <li>- Design &amp; prototyping User centered / service design</li> <li>- Prototyping (building working models)</li> </ul>	<p>11 - 14</p>	<ul style="list-style-type: none"> <li>• Research and manage information effectively to investigate design issues, including Using Mathematics and Using ICT where appropriate (Northern Ireland, Technology)</li> <li>• I can select appropriate development tools to design, build, evaluate and refine computing solutions based on requirements. (Scotland TCH 3-15a)</li> <li>• evaluate, refine and modify their design ideas as they develop in relation to aesthetics, sensory requirements, healthy lifestyle, function, safety, reliability, properties of materials, ingredients, components, sustainability and cost (Wales, technology and design)</li> <li>• present observations and data using appropriate methods, including tables and graphs interpret observations and data, including identifying patterns and using observations, measurements and data to draw conclusions (England KS3 Science)</li> <li>• the roles played by public institutions and voluntary groups in society, and the ways in which citizens work together to improve their communities, including opportunities to participate in school-based activities (England KS3 Citizenship)</li> </ul>
	<p>14-16</p>	<ul style="list-style-type: none"> <li>• Demonstrate an understanding of the design process, and analyse and use various communication methods, such as mock-ups and models (NI, technology and design)</li> <li>• I can select appropriate development tools to design, build, evaluate and refine computing solutions to process and present information whilst making reasoned arguments to justify my decisions (Scotland, TCH 4-15a)</li> <li>• I can apply design thinking skills when designing and manufacturing models/products which satisfy the user or client. (Scotland TCH 4-09a)</li> <li>• explaining everyday and technological applications of science; evaluating associated personal, social, economic and environmental implications; and making decisions based on the evaluation of evidence and arguments (England KS4 Science)</li> <li>• develop and communicate design ideas using annotated sketches, detailed plans, 3-D and mathematical modelling, oral and digital presentations and computer-based tools (England KS3&amp;4 Design and technology)</li> <li>• understand developments in design and technology, its impact on individuals, society and the environment, and the responsibilities of designers, engineers and technologists (England KS3&amp;4 Design and technology)</li> </ul>

<ul style="list-style-type: none"> <li>- Enterprising</li> <li>- Comms and marketing</li> <li>- Business planning and model</li> </ul>	11 - 14	<ul style="list-style-type: none"> <li>• When participating in an enterprise activity, I can explore ethical issues relating to business practice and gain an understanding of how businesses help to satisfy needs (Scotland SOC 3-20a)</li> <li>•</li> </ul>
	14-16	<ul style="list-style-type: none"> <li>• Describe what it means to be enterprising and discuss appropriate methods for market research (NI, business)</li> <li>• expanded knowledge of business and self-employment opportunities in order to inform career horizons (Wales, Careers and the world of work)</li> </ul>
<ul style="list-style-type: none"> <li>- Ethics and security</li> <li>- Analysing potential ethical and security risks</li> </ul>	11 - 14	<ul style="list-style-type: none"> <li>• I am a responsible, competent, confident and creative user of information and communication technology. (England KS3&amp;4 Computing)</li> <li>• I can evaluate the implications for individuals and societies of the ethical issues arising from technological developments.(Scotland TCH 3-06a)</li> <li>• become aware of new developments in ICT and consider the social, economic, ethical and moral issues raised by the impact and use of ICT (Wales, ICT)</li> <li>• I understand a range of ways to use technology safely, respectfully, responsibly and securely, including protecting their online identity and privacy; recognise inappropriate content, contact and conduct and know how to report concerns. (England, KS3 Computing)</li> <li>• the functions and uses of money, the importance and practice of budgeting, and managing risk. (England KS3 Citizenship)</li> </ul>
	14-16	<ul style="list-style-type: none"> <li>• I can explore the impact of cyber-crime for business and industry and the consequences this can have on me (Scotland, TCH 4-03a)</li> <li>• I understand how changes in technology affect safety, including new ways to protect their online privacy and identity, and how to identify and report a range of concerns.(England, KS4 Computing)</li> <li>• income and expenditure, credit and debt, insurance, savings and pensions, financial products and services, and how public money is raised and spent. (England KS4 Citizenship)</li> </ul>

**Apply now!**  
**If you're interested in supporting the young innovators of tomorrow, follow this link to apply:**  
<https://longitudeexplorer.challenges.org>