



STEM CHALLENGE PLANNING

We run our STEM Challenge from any time in October to the end of February which seems to be the most appropriate for schools, not interfering with examinations.

This gives an idea of our timeline. We are happy to let you have further information should you need it. We have also added our Criteria for 2015-16 to help you in your planning.

APRIL	MEETING OF STEM GROUP TO IDENTIFY SUB GROUPS, LEAD CO-ORDINATOR AND ESTABLISH TIMELINE
	BOOK VENUE AND DATES FOR JUDGING AND PRIZEGIVING EVENING
MAY	ESTABLISH SCHOOLS TO BE INVITED – NAMES, ADDRESSES, TELEPHONE NUMBERS, EMAIL HEADTEACHER, CHAIR OF GOVERNORS AND HEAD OF SCIENCE AND/OR STEM COORDINATOR – NAME AND EMAIL
	ESTABLISH CRITERIA FOR CHALLENGE
	START IDENTIFYING AND CONTACTING POSSIBLE SPONSORS AND FUNDRAISERS
JUNE	INVITATION LETTER TO ALL THOSE IDENTIFIED IN THE SCHOOLS ASKING FOR EXPRESSIONS OF INTEREST BY END OF SUMMER TERM
AUGUST	ESTABLISH A TEACHERS PACK TO ACCOMPANY LETTERS TO SCHOOLS IN SEPTEMBER
SEPTEMBER	FOLLOW UP SHOWS OF INTEREST WITH LETTER CONFIRMING CHALLENGE, CRITERIA, AN ENTRY FORM TO BE RETURNED BY OCTOBER HALF TERM AND TIMELINE FOR THE CHALLENGE
	A LETTER TO NON-RESPONSIVE SCHOOLS RE-INVITING WITH SAME INFORMATION AS ABOVE
OCTOBER	COLLATE ENTRIES, CONFIRM TO SCHOOLS WITH TEACHERS PACK. PLAN EVENT ON NUMBERS AVAILABLE TO DATE AND ESTABLISH WHO IS TO BE INVITED AND ARRANGE INVITATION LETTERS (VIPS)

PLAN NUMBER OF JUDGES REQUIRED, WHO TO INVITE ETC.

DECEMBER LETTER OF ENCOURAGEMENT TO SCHOOLS – IDENTIFIED PROJECT AND STARTED RESEARCH?

JANUARY HAPPY NEW YEAR AND LETTER OF ENCOURAGEMENT – WORKING ON MODEL?
REMINDER OF DATES AND FORMS IN TEACHERS PACKS AND TIMELINE.

FEBRUARY PROJECT SUBMISSION FORMS MUST BE RECEIVED END OF FEBRUARY

PROJECT SUBMISSION FORMS, MARKING CRITERIA AND MARKING SHEETS AND CHALLENGE CRITERIA TO BE SENT TO JUDGES AT LEAST A WEEK BEFORE THE JUDGING AND PRIZEGIVING EVENT

ALL ARRANGEMENTS IN PLACE?

FIRST PRESS RELEASE

ARRANGE FOR PRIZES FOR SCHOOLS, PURCHASE OF JUDGES
THANK YOU GIFTS, ETC.

PROGRAMME FOR THE EVENT

CERTIFICATES OF PARTICIPATION FOR ALL GIRLS

CERTIFICATES FOR WINNING TEAMS FOLLOW EVENT

ENSURING ALL IN PLACE AND READY TO ROCK N' ROLL!

MARCH BEFORE EASTER AND LEAVING LAST WEEK OF TERM FREE HOLD THE
JUDGING AND PRIZEGIVING EVENT

SI Bournemouth

29.4.15.

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A STEM Challenge for girls in KS3 Years 8 and 9 2015-16

Why this challenge?

It is nationally and internationally recognized that there is a shortage of girls choosing STEM subjects as degrees, and a growing body of evidence about barriers to subsequent careers. We have created this challenge to inspire girls and encourage them to overcome these barriers.

We challenge you to create a solution to help people in the poorest parts of our world.

World Poverty is everyone's responsibility and we should all help to find a solution to some of the problems, especially those associated with hunger, water, health, lack of education, poor housing and transport.

- Undernutrition magnifies the effect of every disease with children being the most visible victims and is an underlying cause of death from common diseases such as diarrhoea, measles, malaria and pneumonia.
- Globally 161 million under-five year olds are estimated to have stunted growth due to poverty.
- A child born to a mother who can read is 50% more likely to survive past the age of 5.
- More people in the world have access to a mobile phone than a toilet.
- 1.2 billion people live on \$1.25 (80p) a day.
- 1 in 3 children in the developing world have inadequate shelter.

Criteria:

Your idea and design needs to be:

- Sustainable – energy and materials affordable with minimal impact upon the environment.
- Fit for purpose – for example: if it's a design to carry water, then it needs to be water-tight, if it's a design to help children, children need to be able to use it.

You will need to think about:

- What problem your solution is going to help overcome.
- Who is going to use your device or benefit from your solution?
- How and where it is to be used.

- How many people is it going to help?

We've outlined some possible projects below, but we would welcome different ideas. So long as it meets a few simple criteria your project will be appreciated.

- Design a sustainable cooler to preserve food in hot countries
- Design a tool for grinding grains into flour
- Design a sustainable cooker
- Design an all-terrain water carrier for developing countries

Teams:

- Up to 5 girls in a team
- Schools may enter as many teams as would like to participate

Required elements:

- The design brief outlining the perceived need
- Evidence of research into possible solutions
- A plan of the final project
- A demonstration model to support the plan

Judging event

This will be based on the process of the project rather than the accuracy of the final demonstration model and detailed judging criteria will be forwarded along with the entry form.

The proposed challenge timetable:

Start October 2015

Submission of completed project submission form, 29 February 2016

Judging and prize giving event at Bournemouth University on Thursday 17 March, 2016

Soroptimist International: www.soroptimistinternational.org

The project is in line with Soroptimist values:

- Human rights for all
- Global peace and international goodwill
- Advancing women's potential
- Integrity and democratic decision making
- Volunteering, diversity and friendship

**Women inspiring action,
transforming lives**

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June 2015