

# ROTARY TECHNOLOGY TOURNAMENTS

## **Home Team**

### **Technology Tournament Guidance Notes**

## to assist Rotary clubs in Great Britain and Ireland to organise their first Tournament

For enquiries and further information on Rotary Technology Tournaments (TTs) please contact Bob Tunnicliffe at <u>bob.tunnicliffe@btinternet.com</u>



#### Introduction

The purpose of these guidance notes is to help Rotary clubs stage a TT and they should be used together with the relevant year task sheet. It has been found that schools generally favour a TT to be staged in March because it is the best fit with school timetables and diaries.

Normally it takes eighteen months to plan the staging of a TT for the first time so these guidance notes start in the Autumn of year one, with the objective of staging a first TT in March of year three. However it may be possible to devise, plan and run a TT in a shorter time.

A Rotary TT Steering Group (SG) is part of Rotary Youth Services Committee and exists to assist Rotary clubs with running TTs.

The aims and objectives of a TT are:

- To develop student's interest in design, construction and technology
- To encourage students to develop their team working skills whilst developing and building their solution to the task
- To encourage groups of neighbouring Rotary clubs to work together within and across districts to host larger TT events involving more teams and more schools

The main features of the TT are:-

- A one day event for secondary school students
- All costs are shared by the Rotary clubs involved, with no entry costs to schools
- Rotary provides the task, materials, venue, certificates and trophies
- One organising Rotary club for each TT with help from nearby clubs
- Schools can send one or more teams, each of four students, in three age categories
- Teams can be single or mixed gender
- Best team solution to the task as judged in each age group wins
- All students receive a personalised achievement certificate for participating



#### A typical eighteen month programme covering years one, two and three

#### June to September - year one

The initiating Rotary club should contact nearby clubs to see if they are interested in planning a TT. If so a SG can be formed. Normally, the initiating club becomes the lead club and a chairman of the SG is appointed. If there is no interest from nearby clubs then the initiating club should look to create its own SG and proceed with the resources within the club to stage a first TT hopefully with nearby clubs giving manpower support on the day. In all probability the nearby clubs will want to be involved in the event in the following years.

It is a great advantage to have at least three or four clubs involved because it helps with sharing costs, engaging a wider catchment of schools, finding a venue, identifying judges and attracting commercial sponsors.

**Stemnet** (www.stemnet.org.uk) is a government financed organisation that promotes technology in education and involves local business and professional people. It is likely to be beneficial for the SG to contact their local Stemnet office at an early stage of planning because in most cases they can help with school contacts, sponsorship introductions and providing judges.

Typical costs for a start up TT are shown in Appendix A. The most significant cost could be the venue. It depends whether a local hall can be found free of charge, if not venue hire could be a significant cost of hundreds of pounds. Material costs will vary from year to year depending on the nature of the task but should usually be less than £5 per team of four students. During early October of year one the SG will receive the TT task for year two.

The SG is advised to study the task because it will be helpful when the SG visits their first TT in March of year two to observe experience a TT in action.



#### January and February - year two

This is the time period for assessing possible venues for your TT. The SG should liaise with local secondary schools to obtain the contact details of Head Teachers and the Head of Design and Technology. Advice on the sizing and layout of a suitable venue is attached in Appendices B and B1.

#### March - year two

The SG should visit as many TTs as possible. When a SG sees a TT in action for the first time and experiences the buzz and excitement of the event this will inspire enthusiasm for their first TT in a year's time. Many useful organisational tips are learnt during these visits which are helpful when planning for their own TT.

#### April to August - year two

SG decides upon and books the venue for March of year three. SG sends letters of invitation (Appendix C) and application form (Appendix C1) to schools. Direct schools to the Rotary International in Great Britain and Ireland website for TT information. SG contacts possible sponsors to help with costs and providing judges.

#### September to December - year two

The SG should meet on a monthly basis until their TT is up and running. During early September the SG reviews responses received from the schools and acknowledgement letter (Appendix D) is sent to the schools. The SG agrees a plan for schools that have not responded so that they can be personally contacted. Rotarians are often school governors which can be helpful to promote and support the TT offer. Make arrangements for a qualified first aider to attend the event. Carry out a risk assessment of the proposed venue. Request risk assessment forms from the venue

Send invitations to the local mayor, Rotary district governor and assistant district governor and local press and assign a SG member to arrange welcoming and hosting. The TT task for year three will be received in September of year two and the SG should assign roles for the event such as chief judge, chief steward, materials procurement, venue coordinator, trophies and certificates. The chief judge organises the construction and testing of solution ideas for the task and holds meetings with the judging team so that they understand the judging criteria detailed in the task.



#### January - year three

Send letters (Appendix E) to schools to confirm final event day details for the schools. Confirmation of schools attending and their team details is important. Order, receive and check all materials detailed in task sheets for the projected number of teams. Order trophies and medals as detailed in Appendix A, allowing time for engraving.

#### February - year three

Preprint the certificates and print off all the paperwork required on the day. Certificate template (Appendix F) is available on the Rotary Youth Services Committee page on the website. These were introduced last year as a means for clubs/districts to produce their own certificates at locally for any of the youth competitions. They are interactive so can be personalised for both individual participation and winning teams at each age level. You may wish to produce your own wording and design and the online Rotary shop has embossed template cards suitable for this purpose. Look to include sponsors names and their business logos. Appendix F1 suggests useful wording for printing on the reverse side of certificates.

Send a pre-event press release - available on the Rotary website or via your district marketing, PR and communications officer to the local press including an invitation to the TT. Ask if they can book their press photographer to attend. Collect up the task materials for all the named teams in each age category.

#### March - year three

The SG should make arrangements to set up at the venue the night before if possible. If this is not possible then the set up team should arrive no later than 8.00 am to set up in accordance with the agreed floor plan. A typical programme and duties for the day is shown in Appendix G. These guidance notes are not intended to give details of the judges and stewards roles but the SG will have seen these roles at TT's visited previously. Further information on judge and steward roles can be obtained from the Rotary TT SG.

#### April - year three - post TT event

Send letters and photographs to all participating schools to tell them of the winners of the TT. Thank them for participating and give them the date and venue for next year's TT. Some Rotary clubs attend a school assembly to celebrate the winning team's achievements.



### **APPENDICES**

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#### Appendix A

#### **Technology Tournament costs**

#### Venue costs

Vary considerably from free of charge to several hundred pounds. See Appendix B where it is advised that you need a venue of 2,400 sq feet for a start-up TT with 30 teams.

A school hall is the most likely suitable venue and probably free of charge. Sports halls are also satisfactory low cost venues.

#### Material costs

Vary each year due to the nature of the task. The costs for the TT materials per team can be calculated from information provided in the relevant task sheet.

#### Trophies

These need not be elaborate or expensive. A typical classic trophy is made of polished mahogany (12ins x 9ins) with an engraved plaque. These trophies cost around £45 with the plaque engraved to your specification. Another option is for engraved contemporary glass trophies. Trophies are usually presented to the winning teams in each age category. Trophies can be given annually or be a perpetual trophy held by the winning school for a year then handed on to the next winner with the names being added each year.

#### Medals

Four medals with ribbons for each member of the winning team in each age group. Budget a cost for medals at £2.50 each.

#### **First Aid**

You may have a qualified first aider within the Rotary clubs involved but if not it is necessary to pay around £60 for these services from a local first aid organisation or agency. Schools and the Rotary insurers expect this to be in place.

#### Miscellaneous costs

Allow £100 for other costs such as certificate card, printing, posters, catering and refreshments.



#### Appendix B

#### **Technology Tournament venue**

When booking the venue, the SG will not know how many schools and teams will be attending. It is likely that there will be 18 to 20 teams to a start-up event. In the invitation letter to schools it is a good idea to say that space is limited and that schools will be accepted in the order they respond. Subsequent year's TT events could have bookings for 35 to 40 teams.

The best size for the student team tables are 6'x2' but the total floor area occupied by each team with four seated students and allowing for end walkways would ideally be 9'x 6' (54 square feet). For health and safety proposes there should be no walkways behind the students. All walkways should be three feet wide so judges and stewards can talk to the students from the narrow end of the tables.

A typical large size event layout for 30 teams is shown in Appendix B1, showing the key designated areas ideally required.

An added bonus would be a small kitchen for refreshments and a student cloakroom with an area set aside for accompanying teachers and staff members to relax. Do encourage teachers to participate in teacher teams and make provision for that.

A typical layout is shown on page nine in Appendix B1 which can be scaled up or down to accommodate the number of teams participating per age category.



Appendix B1

#### Technology Tournament venue plan

#### A typical venue layout for 30 teams





#### Sample letters of invitation

Appendix C

Letter to the head teacher and head of design and technology

Technology Tournament 20\_\_\_

Dear

I am writing to invite your school to participate in Technology Tournament 20\_\_\_. It is a one day event which brings together teams of four students from schools across the area that are set a technology task to solve during the day. This provides an opportunity for team building and practising communication skills as well as problem solving. A presentation to fully explain the ethos of the Technology Tournament to the school staff can be arranged.

Date	
Time	Starts at 9.30am and finishes at 3pm
Location	
Teams	Of four students from Key Stage 3, Key Stage 4, and Key Stage 5 and optional teachers' team
Task	The task is set at Foundation, Intermediate and Advanced levels. The required tools for each team to bring will be advised. All materials will be provided
Lunch	Students should bring their own packed lunch

An application form is enclosed which I would ask you to complete and return to the address below

Yours sincerely

Technology Tournament Organiser

Address	
Email	
Telephone	



Appendix C1

#### **Technology Tournament Application Form**

Date Time 9.00 a.m. – 3.00 p.m. Venue Address

School contact name

Position

School

Address for communication

Telephone	No
Mobile	
Email	

We shall be entering teams of four students in the following categories:

Key stage 3(ages 11-14)(Foundation level)number of teamsKey stage 4(ages 15-16)(Intermediate level)number of teamsKey stage 5(ages 16+)(Advanced level)number of teams

Completed application forms should be sent to the Technology Tournament Organiser



Appendix D

#### Sample acknowledgement letter to be sent to schools in September of year two

Dear

Thank you for returning the application form registering your teams (copy attached).

#### Date of Tournament

Venue

#### Address

Time 8.30 - 9:00am for registration. The tournament will start promptly at 9.30am

#### General

Accompanying teachers are encouraged to participate in teacher teams following the Advanced Team task so please bring additional tools for the teachers. **Teamwork is an important component contributing to successful problem solving.** Each team will consist of four students. The year groupings of the students are flexible and are for each school to decide. It could be all team members from the same year group or a mixture.

- Foundation Task is for students in Key Stage 3 ages 11 to 14
- Intermediate Task is for students in Key Stage 4 ages 15 to 16
- Advanced Task is for students in Key Stage 5 16+

It is advisable to inform students that they are expected to work in teams and will be assessed on:

- Planning and teamwork- use of time and resources, team organisation and management
- **Design analysis** analysis of the problem, awareness of physical constraints and principles
- **Design development** generation of more than one idea and the development of the solution, presentation and communication of ideas
- **Realisation** making skills, appropriate use of materials
- Their project portfolio
- Success at the testing stage



It is required that schools entering Key Stage 3 and 4 teams have either a member of staff or a technician in attendance but they will not be allowed to assist students in the task in any way. Please ensure that you have fulfilled LEA requirements for taking pupils out of school. The task uses a limited selection of materials in order to inspire creativity and planning in their use to achieve a solution. Materials are provided on the day and no extra materials will be used.

Yours sincerely

Technology Tournament Organiser



#### Appendix E

#### Sample January letter for year three

#### Dear

Thank you for entering teams in the forthcoming Technology Tournament. We look forward to welcoming you and your teams on the day and hope it will be an enjoyable and rewarding experience for all those involved. The event will be held at

This year we expect to have ... teams from ... schools with ... at Foundation Level, ... at Intermediate Level and ... at Advanced Level.

#### Parking and other arrangements

- Please arrange for your teams to be at the event venue between 08:30 and 09:00.
- On arrival, teams will registered and allocated a work table
- Parking for vehicles will be in the .....
- If you intend to use a vehicle larger than a minibus, please advise so that alternative parking can be arranged.
- Students and accompanying staff members should bring their own packed lunch.
- A list of tools to be provided by schools for each team is included in the attached Information for schools and teachers document.
- You will also find a note of items which are **not** to be used.

#### Timetable

- 08.30 09:20 Arrival and registration of teams, allocation of work tables
  09:30 Technology Tournament competition begins Teachers are strictly required not to approach teams once the tournament is in progress. Any required approaches must be through the judges
  12:00 - 12:30 Lunch - most students continue working whilst taking lunch
  13:45 - 14:30 Competition testing and judging. Teams will demonstrate their finished task solutions and final judging will be completed
  14:30 - 14:45 Results will be announced and awards presented
- 15:00 Event ends

I have attached more detailed information about the nature of the competition and a list of tools which must be brought by each of your teams. Please let me know if you need any further information or wish to make changes to your entries.

Yours sincerely Technology Tournament Organiser



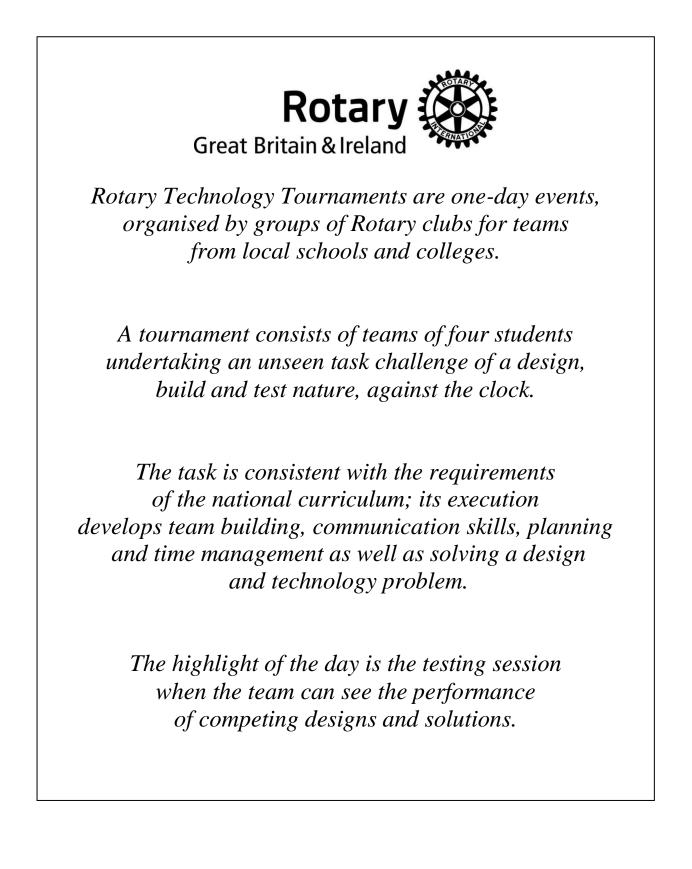
Appendix F

This RIBI interactive certificate template can be downloaded from the RIBI website http://www.rotarygbi.org/?d=1&s=certificate





Below is an optional printing suggestion for reverse of certificates





Appendix G

	EXAMPLE DUTIES FOR THE DAY		
TIME	TASK	NUMBER	chec
08.00hrs	Stewards arrive and check in, set up the tables and signage.	6	
	Ensure there is a Rotary Roundel in a prominent place where it can be seen at the presentation and final ceremonies.		
	Cover tables with protective sheeting.	4	
	Deliver correct age group materials for Technology Task to each table.	4	
	Set up registration tables.	2	
	Stewards stationed in car park and corridors as necessary for directions and safety.		
08:30hrs	Brief stewards and allocate responsibilities for the day.	Chief Steward	
08:30hrs	Guide students at the main entrance.	1	
	Direct drivers to car park area.	4	
	Direct arriving teams to registration desk.	2	
	Man the registration desk.	2+	
	Direct teams to tables and fill in name forms as to be used on certificates.	3	
	Forms to be completed and handed to print team.	2	
09:25hrs	Welcome speech and Housekeeping points	MC	
09.30hrs	Chief judge welcomes entrants, gives briefing on day's activities including time to be spent on planning, portfolio, task and testing.	Chief Judge	
	Hand out task sheets and other documents in sealed envelopes.	2	
	Judges briefing.	Chief Judge	
	Printing of certificates for competitors to be commenced.	Admin	
	Design phase stewards to marshal the working areas.	6	
	Judges take up positions.	Judges	
10:00hrs	Chief judge announces that construction may begin.		
11:00hrs	present certificates to participants in each team on each table	Admin	
11:30hrs	Visitors and guests begin to arrive. Hosting stewards welcome, show them round the event. Introduce visitors to attending club president (s) at a convenient time.		
12:00hrs	Presidents greet civic party.	Presidents	
12:00hrs	Lunch announcement for students.		
	Judges and stewards to lunch in shifts.		
12.30hrs	Students finish lunch.		
13.45hrs	Call to finish construction of TT solutions.	Judges	
	Begin testing and evaluation of task solutions of all teams.	Judges	
14:30hrs	Judges results to be passed to MC.	Judges	
	MC announces results and proposes vote of thanks.	MC	
14.45hrs	Present certificates, medals and trophies to the winning teams: take official photographs	4	
14:55hrs	Closing address by VIP's, presidents and sponsors as appropriate.		
15:00hrs	Students leave.		
15:05hrs	Dispose of all materials, debris etc.		
	All hands on deck to leave venue clean and tidy.		
15:30hrs	End of the day.		