



Create Sport!

www.go4set.org.uk



Create Sport

Sport is an essential part of our lives; it is great fun, good exercise and something that everyone can take part in. There are hundreds of different sports and each one needs different equipment and different arenas to be able to play.

What sports do you play in your school or community? What arenas are available to you and are any of these arenas used for many different sports, such as a school playing field or a local track in a park?



Your challenge is to work with the other members of your team to look at creative, innovative but practical ideas for a new sports venue for new or existing sports.

Start by thinking about the following:

- What facilities does your school or local community already have? For example, a sports hall at your school.
- Are there any existing arenas in your school or community that could be adapted for playing more sports?
- Are there any sports you know are played in your school or community that do not have anywhere to play?
- Are there any new sports you would like to play but do not have anywhere to play them?

The answers to these questions will help you to create a detailed list to include in your project proposal. This list is called the '*specification*'. You will probably go through many concepts before you produce your final design so try and focus on three of the following areas:

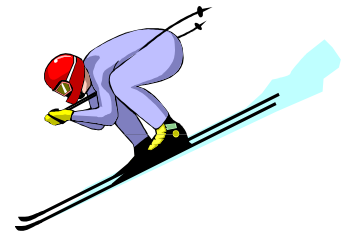
- Structure
- Aesthetics
- Sustainability
- Community/Society aspects
- End Users
- Legacy/Flexibility
- Safety



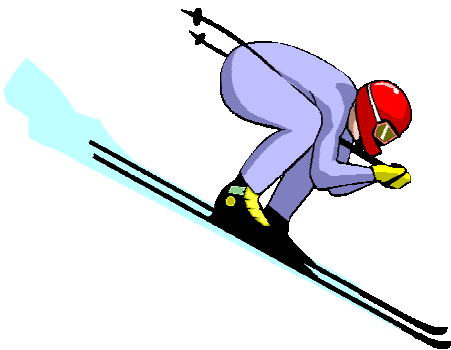
Create Sport

What to do first?

The first thing you should do is research your existing facilities in the school or local community. There may be a few possibilities for the focus of your project; you could have existing facilities in school or in the community that could be improved or regenerated to make them more accessible. Alternatively, you could think of a new building entirely in which case you need to think about the location of the site. Either way, there will be possible constraints to your plans so try and think about these problems as you go along.



You should consider costs and other environmental factors in your designs, however you can recommend further more detailed costing should be undertaken at a later date.



Start thinking about the materials relating to sports facility design, as well other environmental aspects of the design, such as collecting rainwater or using alternative sources of energy. You will find more information, as well as some details on the issues detailed on the Sport England web site:

http://www.sportengland.org/facilities_planning/design_guidance_notes.aspx?sortBy=alpha&pageNum=3

You will have lots of ideas but it is best to focus on one design recommendation; you will not have time to do more! You can include your other designs and ideas as examples of research and planning within your project and project report and do not forget to give your reasons for choosing your final design recommendations.



Create Sport

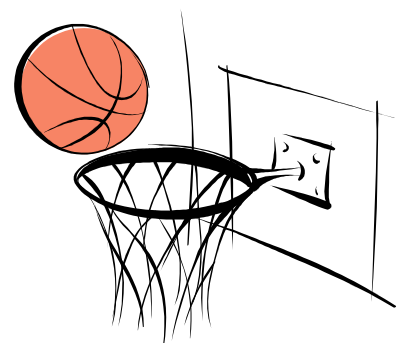
Then think about....



- Structure — It is great to have an innovative, iconic model, but it needs to stand up! Make sure your design is practical as well as exciting.
- Aesthetics — Think about what inspires you, and will hopefully inspire others. Your design should be modern and innovative.
- Sustainability — You should consider the impact on the environment, especially with areas such as the lighting, heating, ventilation, water and insulation. How long do you want your building to last?
- Community/Social Aspects — Your project should ensure a school or community need is met. Think about transportation to the facility, especially if it is a new location and consider the construction methods; they should have as little impact on the environment as possible.



- End Users — Venues affect athlete's performance so their needs must be considered as should spectators' needs, such as their viewing capabilities and proximity to the action. What about the media and people who work in sporting venues?
- Legacy/Flexibility — Your facility needs to be multi-functional so think about alternative uses. For example, if you focus on a school sports hall, how can this be used outside of school hours?
- Safety — Your sports facility design must be safe for everybody and it is important that you show that you have considered safety issues in your final design.



Create Sport

Plan of action!

- Make sure you understand the project brief and find answers to your starting questions.
- Create your specification (the list of features to be included in your proposal). You should try to do this as early as possible, the first week is ideal!
- Create as many ideas as you can which might follow your specification. Decide which main idea/set of ideas, to focus on and develop into a practical proposal.
- Always keep good notes about what you are doing; a team diary of progress is a good idea.
- Write your project report as you go along.
- **Plan** your work over the few weeks using a Gantt Chart (at the end of this booklet):
 - Make lists of the things that need to be done.
 - Try to organise these things into a suitable order.
 - Try to decide which team member/s will do what things.



Good planning at the beginning of a project means you will be more organised and will make your project more structured. This will give you the ability and confidence to finish on time!

- Evaluate the outcome of your project; how well does it satisfy your specification? How effective is your model?
- Give yourself a team name and allocate roles depending on what each member of the team is good at, for example Managing Director—The boss!, Design Engineer—good at ideas and drawing, Finance director—in charge of how much money is being spent / saved etc.

What you need to produce

The end of your project is your Celebration and Assessment Day (CAD) where you will present what you have done to professional engineers. The assessment has **four stages** that must be ready by the day:

1. A model of your project

Your model can be built with any materials available and should visually demonstrate how your project would work and look.

2. A display

This is a written and visual method of communicating your project to the assessors, who will visit and question you at the stand. Try not to clutter your board; think of what looks good and best demonstrates your project to a passer by. Maybe you could take photos of you all at work throughout your project, or could draw a logo for your team?



Anything you need to stick things to the board, you will need Velcro pads; ask your teacher to get these. Your teacher will also have the dimensions of the board.

3. A five minute presentation and questions

You may want to use PowerPoint or could just use your model and display but you need to talk about how your model is constructed.

Also, you should talk about how you went about coming up with your ideas and how you overcame any problems. Make sure every member of the team speaks during the presentation and that you know enough about your project to be able to answer questions about it from the engineers.

Remember, practice makes perfect!



What you need to produce

4. A written report

You need to hand in a professional report **one week** before the CAD so the assessors can read through this before your presentation: you will also need to bring copies on the day that are printed on A4 paper and bound as a professional report. Your report should include the following information:

- Say something about yourselves; the team members, your teacher and your mentor and their company.
- Explain what thoughts you all had when you were first presented with the challenge.
- Describe any research you had to do to understand the challenge
- Explain how you planned your project, how you decided when to do things and who would do them.
- Describe how you developed your first ideas into a main proposal.
- Describe any problems your team had and say how you dealt with them.
- Describe how you presented your proposal and how you built your model
- Say how successful your proposal is and why.
- Try to say how your proposal might be useful in other situations, such as in the developing world.
- Personal Appendix: half a page on each individual student and your contribution, tasks and what skills you have learned during the project.

Try to think of suitable titles for each section. Consider putting some of your diagrams and graphs into a special section at the end, called 'Appendix', so not to clutter the main report.

Make a front cover for your report. You will need to state the names of your team, school, teacher(s), company mentor(s) and company.

Get your mentor to check your report a few days before the submission deadline; the quality of the report (spelling, grammar etc.) will be considered during the marking process so you may need time to edit the report. There is more guidance in the scheme Handbook; your teacher has a copy.



Timetable

Launch	Meet with your mentor and arrange when you are going to do the project and when you are going to go on your company visit.
Week 1	Start your research. Look at the Sport England and other websites for ideas.
Week 2	Decide which areas you are going to consider and draw up some possible ideas.
Week 3	Choose from your ideas and decide how you are going to build your chosen design. Explain why you chose your solution and think about what materials you will need.
Week 4	Begin work on your model. How can you best represent your idea? What materials will you need for your model? Ask your teacher how to get them.
Week 5	Work on your model and start writing your report.
Week 6	Work on your model and your report. Your design may alter as you build your model. Keep a note of this and explain it in your presentation.
Week 7	Carry on with the report and the model.
Week 8	Get your report checked by your Mentor and send it to Go4SET to be passed to the Assessors.
Week 9	Carry on with your model, and start to prepare your project display and presentation.
Week 10	Put the finishing touches to your model, your project display and your presentation.
CAD	Present your work to the Assessors.

Timetable

The table below is what engineers call a **Gantt chart**. You should use this to plan out how long you need to spend on different tasks. Fill out the weeks as in the example to decide when you plan to do a task.

		Week Number																			
		1	2	3	4	5	6	7	8	9	10										
Tasks	Example																				
	Specification of problem																				
	Company visit																				
	Research																				
	Generation and evaluation of ideas																				
	Design ideas and evaluation																				
	Prototyping and testing																				
	Manufacture and production																				
	Final evaluation & modification																				
	Writing report																				
	Producing presentation																				

Go4SET

EDT



Go4SET Regional Contact:

Company Mentor Contact:

Project Report Submission Date:

Date and location of CAD