design and build: Aquatics Centre

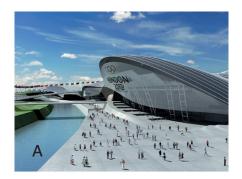


The Aquatics Centre is where all the swimming events will take place. Like your local swimming pool it needs to be indoors but should also have stadium seating as it is very popular.



- 1. Two 50 metre pools and one diving pool
- 2. A high diving board
- 3. Stadium seating around the pools for spectators
- **4.** A roof covering the entire stadium so the swimmers don't get cold!

Here are some pictures to help you:







- A. This is a design for the London 2012 Aquatics Centre by architect Zaha Hadid. Look at the shape of the building. What does it make you think of?
- B. This picture shows you the seating around a swimming pool.
- C. Will the Aquatics Centre also be used by members of the public?



design and build: Basketball Arena

Basketball is an indoor sport that is played on a court. It is a very quick game and the player's score by throwing a ball through a hoop or basket.



- 1. A court and baskets
- 2. Seating around the court
- **3.** A roof for the stadium
- **4.** What else does your stadium need? What about an action replay screen?

Here are some pictures to help you.







- A. Here is a picture of a Basketball Stadium.
- B. Basketball is very quick so many stadiums have big screens to show action replays.
- C. The players must jump high to get the ball through the hoop or basket.



design and build: Velodrome

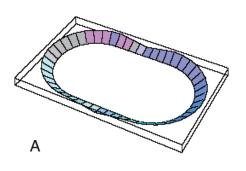


The cycling velodrome is an indoor track which cyclists race round very fast. The track has a slope or bank so that the cyclists can go round very quickly.



- 1. A track that should be banked or sloped (look at the pictures)
- 2. Seating all around the track so people can watch
- 3. A roof that covers all the track
- 4. What else will make your Velodrome interesting?

Here are some pictures to help you.







- A. Look at the shape of the track. Can you see how the track slopes in to the centre?
- B. This is the Velodrome in Manchester. Look at the shape of the building.
- C. Here is a picture from inside a velodrome of cyclists racing in a team





design and build: Hockey or Handball Stadium

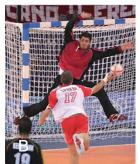
Hockey and Handball are both indoor games. Two teams compete against each other and must score goals to win the game. Hockey and Handball are very quick games so the people watching need to be seated quite close to see the players.



- 1. A field for playing with goals at each end
- 2. Seating for the audience
- 3. A roof to cover the stadium

Here are some pictures to help you:







A/B. Hockey and Handball both involve two teams competing against each other

C. A picture of a Hockey Stadium







design and build: BMX and Mountain Bike Tracks

BMX racing is very quick and takes place on a dirt track. The riders race each other round the dirt track jumping over ramps and flying round tight bends.

Mountain biking also takes place on an off road course, usually across country. A mountain bike course is longer than a BMX course. Your job is to design and build an exciting BMX track or Mountain Bike course that will be great for racing and fun to watch.

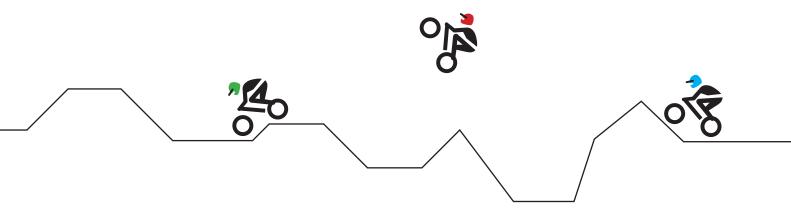


- 1. A track with ramps and turns
- 2. Stadium seating don't forget to put in an entrance and exit
- 3. Try and think of extra things to put in, for example can you make bikes for the track?

Here are some pictures to help you:



- A. BMX riders jumping over dirt ramps.
- B. Drawings of BMX tracks can you design something better?



design and build: Fencing Hall

In fencing two people play against each other using a type of sword called an Épée. The aim of fencing is to score points by hitting the other player with your Épée. Fencing takes place in an indoor hall and the players need special protective clothing and a face mask so they don't get hurt. Your job is to design a state of the art fencing hall for both able bodied and disabled athletes



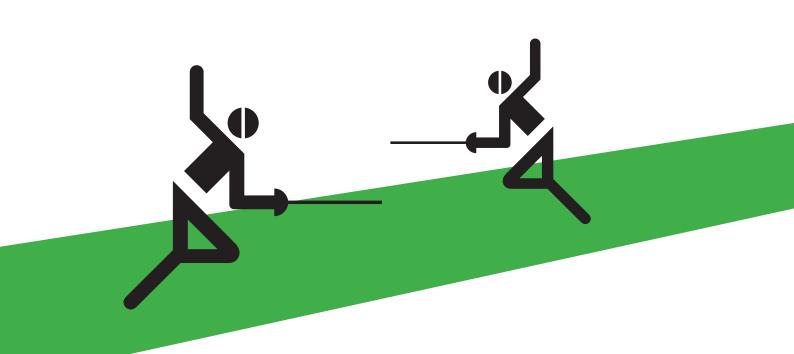
- 1. An indoor hall with an area called a strip or piste which is 2 metres wide and 14 metres long
- 2. Seating for the spectators
- 3. Changing rooms and refreshments areas

Here are some pictures to help you.









design and build: Olympic Stadium

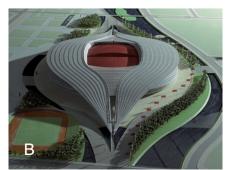
The Olympic Stadium is the main stadium that will be built in the Olympic Park. It needs to have a field and running track for the athletes as well as stadium seating so that up 80,000 people can watch the games.



- 1. A field and track in the middle
- 2. Seating around the track
- 3. A roof over the stadium
- 4. Can you think of anything else your stadium needs?

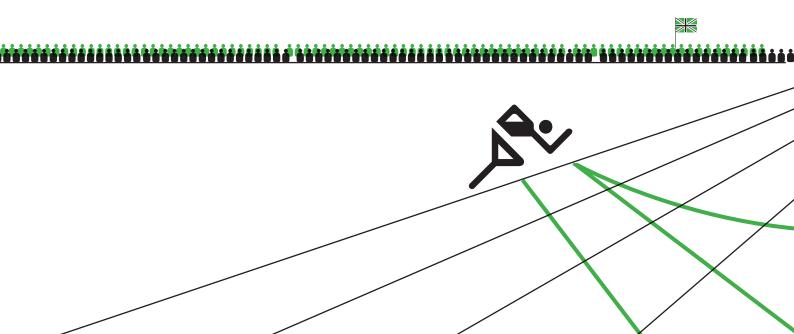
Here are some pictures to help you with ideas; look for more stadiums on the internet too.







- A. View from inside the stadium
- B. Stadiums don't have to be round look at the shape of this stadium.
- C. The Coliseum in Rome it's a very early example of a stadium built 2000 years ago.



design and build: Olympic Village



The Olympic Village is where the Athletes will stay during the Games. The Olympic Village is a place to relax and meet each other athletes when they are not competing. The village must be a welcoming place for athletes from all over the world.



- 1. Your village will need lots of living apartments. Look at some of different kinds of building in the pictures
- 2. It will also need to have green and open places for people to meet

Here are some pictures to help you:







- A. This is an artists drawing for an Olympic Village. There are a lots of apartment block but also a lot of green spaces.
- B. Will your Olympic Village have different kinds of building from around the world like this mudhut?
- C. Or will it look like a traditional English Village? Can you find any other examples of villages to give you ideas?







