

Student Guide

Activity Title: Clockwork Challenge

You will need:

- Paper
- Pens/Pencils
- Lego Kit

Time:

35 minutes

Team:

Your team will include 4 members of your class

Objective:

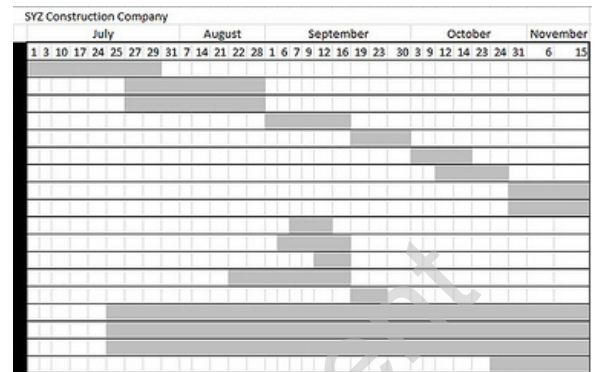
You are a project management team responsible for the construction of a new railway station. Your team will organise all of the subcontractors (other companies helping with the construction project) in a way that will get the station built in the least amount of time. Your goal is to finish construction in **125 days or less**. **The team who finishes in the fewest number of days wins!**

Instructions:

- Use the LEGOs to create your “plan”
- 1 LEGO Brick = 5 days

Specifications:

- You may use the LEGOS in any way you want to create your “plan”, as long as you can show that **no more than 3 tasks being done at one time**
- **You must complete 6 tasks:**



Example Schedule

Task (LEGO Colour)	Days to Complete	Other Restrictions
Electrics (Orange)	40 days	5 day inspection after every 10 days worked. All other tasks can proceed during the inspection period.
Plumbing (Blue)	50 days	None
Flooring (Pink)	35 days	Cannot start without finishing Heating and Air Conditioning, and cannot when Glass Work is being done because the Floors and Glass are being installed by the same contractor
Glass Work (Yellow)	30 days	Cannot be done at the same time as Flooring because the Flooring and Glass Work are being done by the same company
Heating and Air Conditioning (Tan)	65 days	Must be finished before Flooring can be started due to Health & Safety concerns
Brick work (Red)	100 days	None

Background Information:

Crossrail is among the most significant infrastructure projects ever undertaken in the UK. From improving journey times across London, to easing congestion and offering better connections, Crossrail will change the way people travel around the capital.

With 40 stations along the Crossrail route, including 10 brand new ones, the refurbishment and construction of stations along the Crossrail route is critical because without stations, people won't be able to use the incredible new rail service.

Every station construction contract must be managed by a project management team. This team of managers is responsible for:

- Everyone's safety at the construction site
- Making sure construction is on schedule
- Making sure construction is within budget (doesn't cost too much)

