

# The Clockwork Challenge

## You will need:

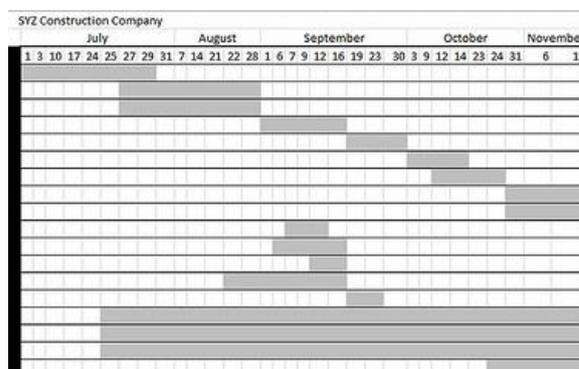
- Paper
- Pens/Pencils
- Lego Kit

## Time

35 minutes

## Team

Your team will include 4 members of your class



Example Schedule

## Objective

You are a project management team responsible for the construction of a new railway station. Your team will organize 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**. 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**:

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)	10 days	None
Flooring (Pink)	50 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)	35 days	Must be finished before Flooring can be started due to Health & Safety concerns
Brick work (Red)	100 days	None

## Background Information

Right now on the Crossrail project, the main focus is moving towards station construction. Tunneling is scheduled to be complete by the end of 2014, and as tunnel construction is coming to an end, station construction has just been getting started. 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)

