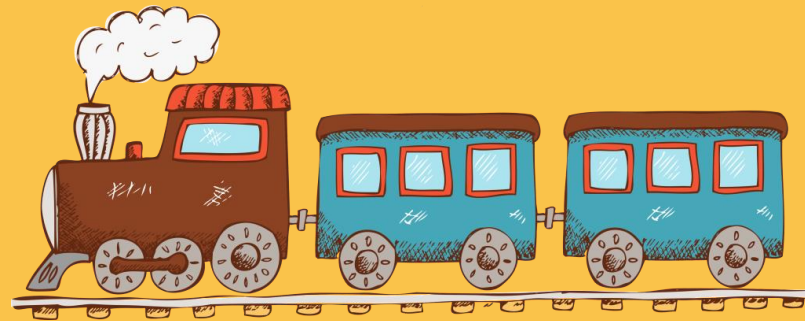


# Rail Systems





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# Rail Track Ballast



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# Rail Track Ballast

Group 7

Mr. Teeraphob Uecharoensab 5813023 ME4

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Mr. Kotchanut Jaroenjit 5813206 ME4

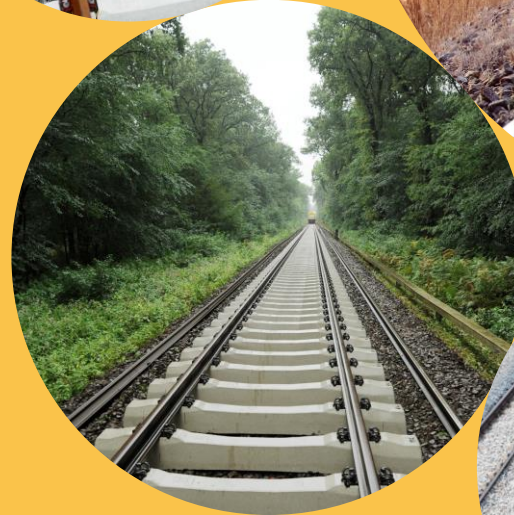
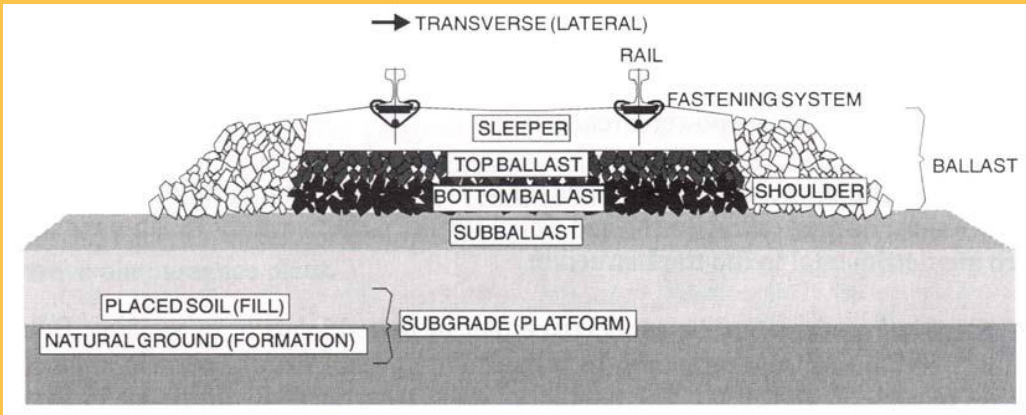
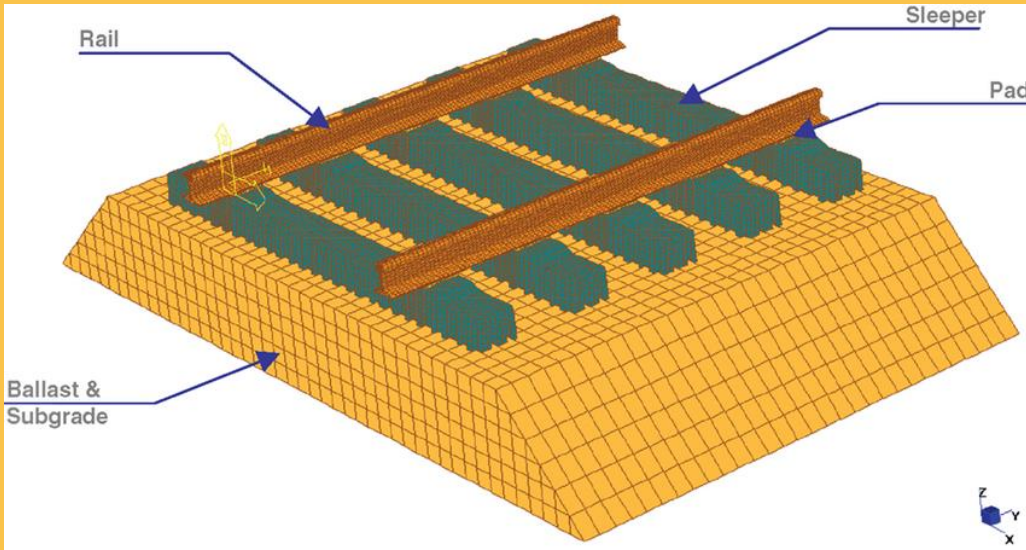


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# What is Rail Track Ballast?

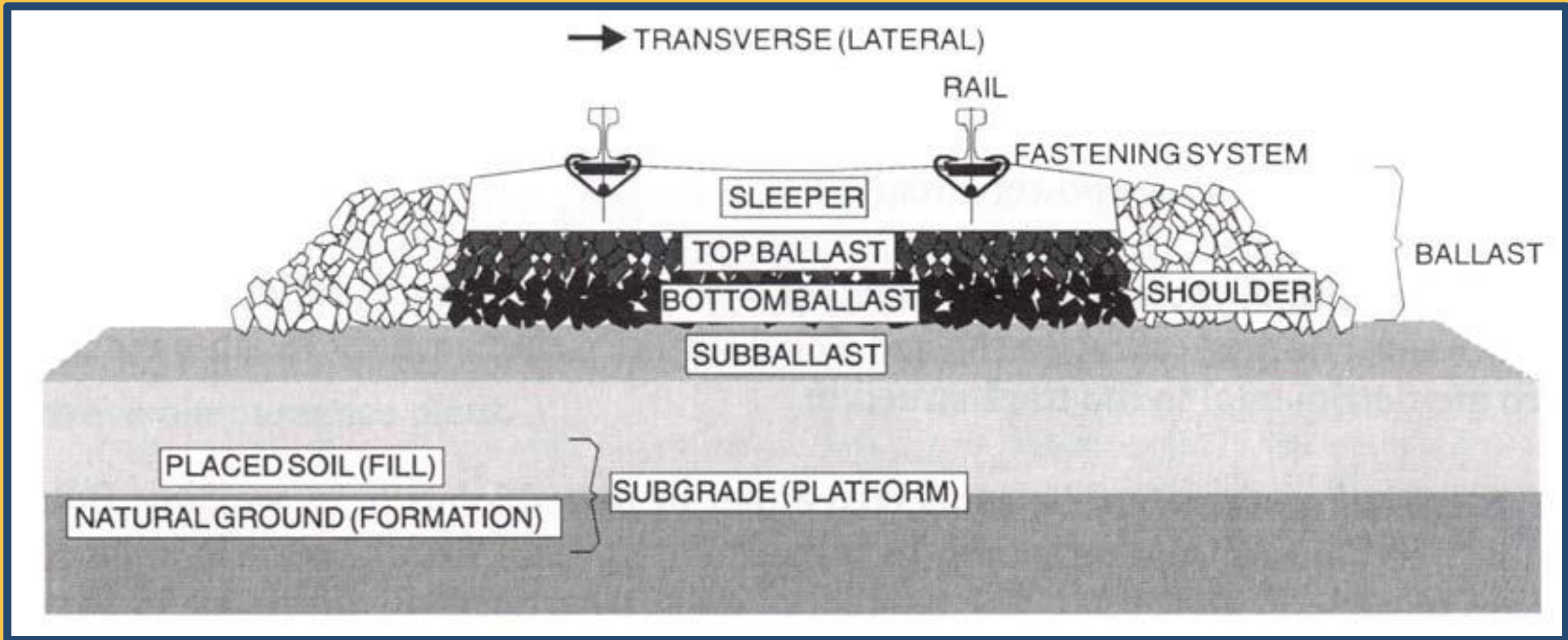
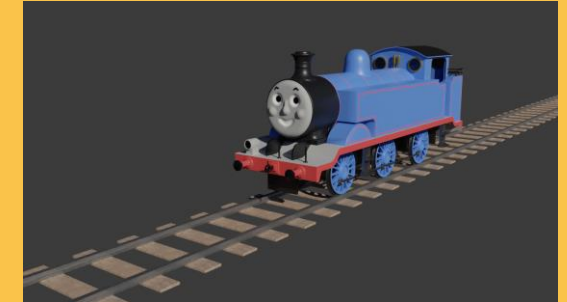


# Railway Track



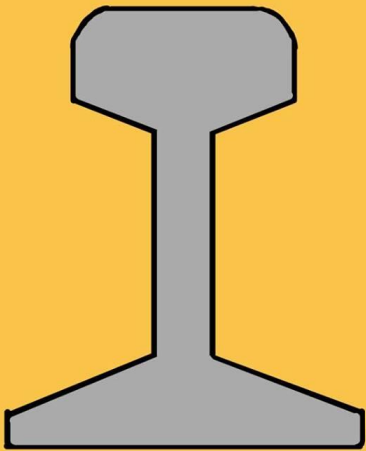


# Component of Railway Track



# Railway tracks

Railway tracks consist of two parallel steel tracks and lay steadily on the railway sleepers. It provides direction guidance and alignment for vehicles.



# Rail fastening system

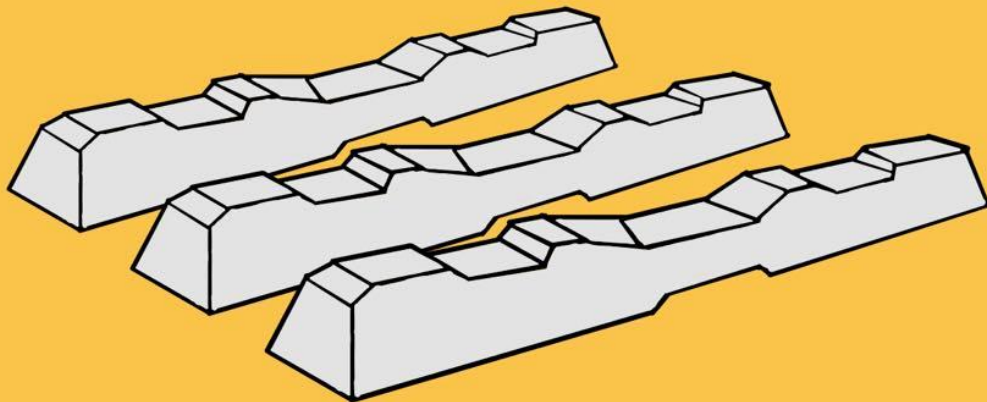
Rail fastening system is used to fix rails to railway sleeper.





# Sleeper

Sleeper is a rectangular support for the rails in railroad tracks. Sleepers are traditionally made of wood, but concrete is now also widely used, especially in Europe and Asia.



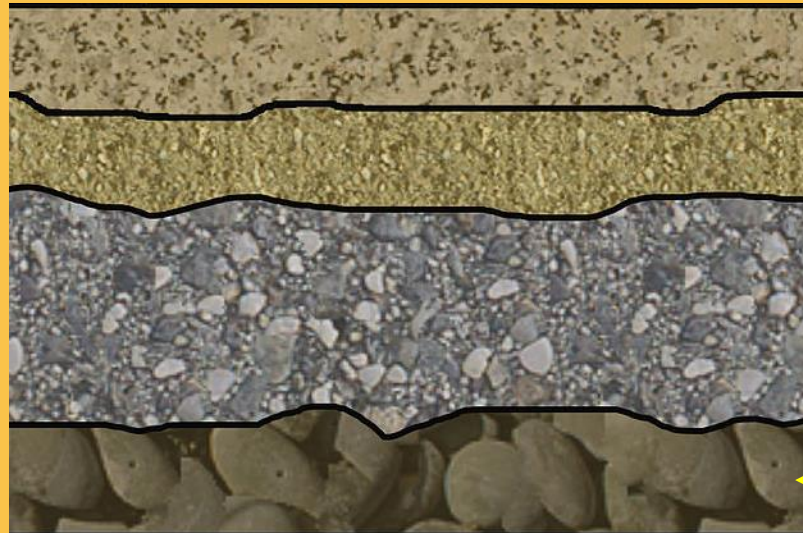
# Ballasted tracks

Ballasted track is a type of traditional railway tracks. Generally, laying ballast under the railway sleepers to reduce the stress on the ground. A layer of gravel was laid between ground and railway sleeper to form the ballast bed.



# Subgrade

Subgrade(soil) is the native material underneath a constructed road or railway track.



Subgrade



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# Hand-on Activity







# TEAMWORK



Folding



Glueing



Railway Setting



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# Component of Railway Track

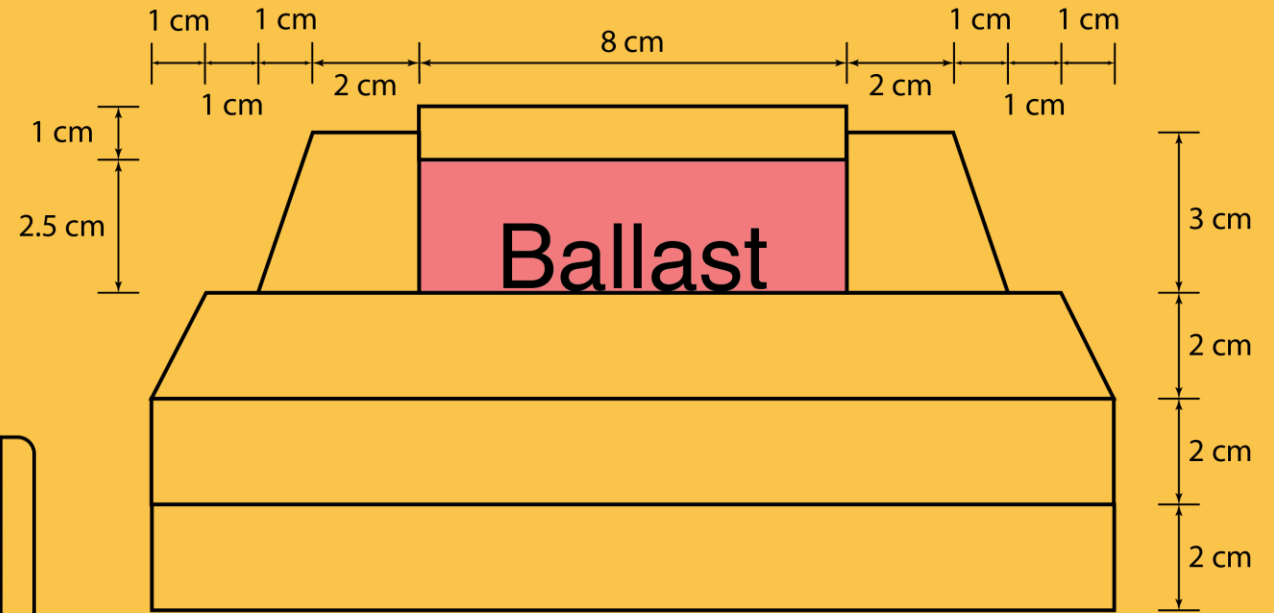
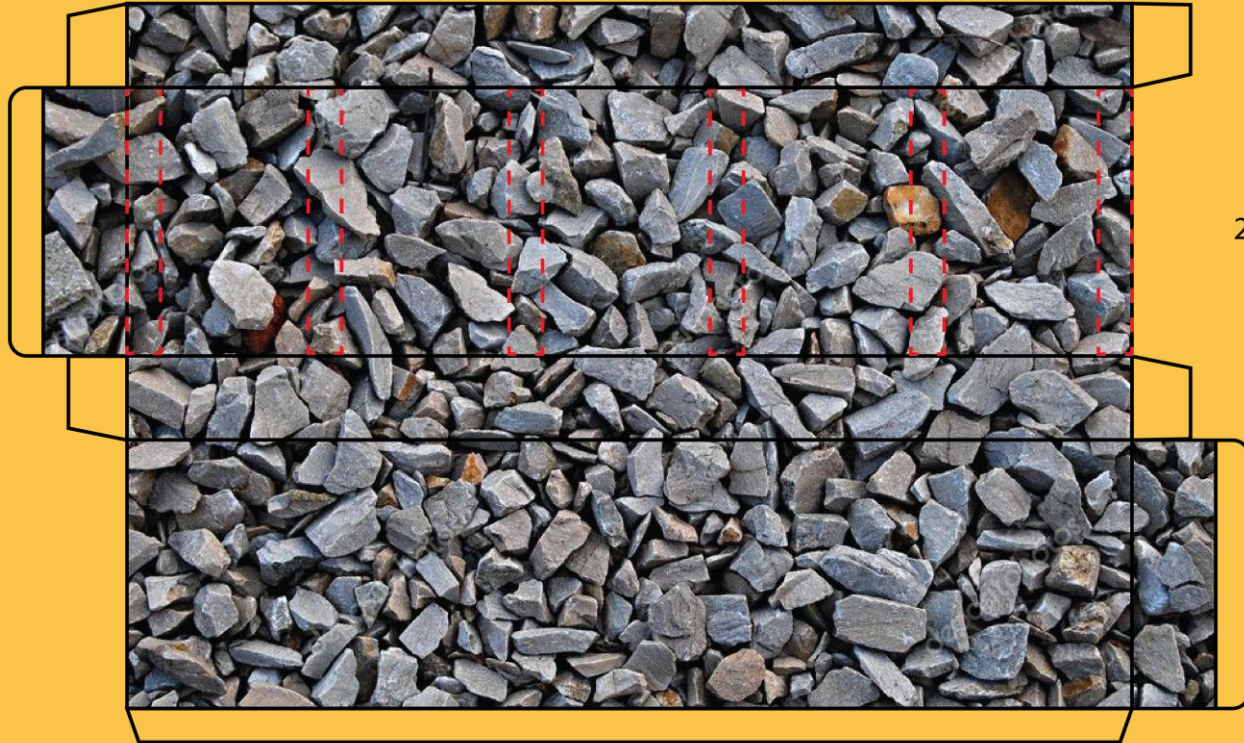


# Sleeper & Rail





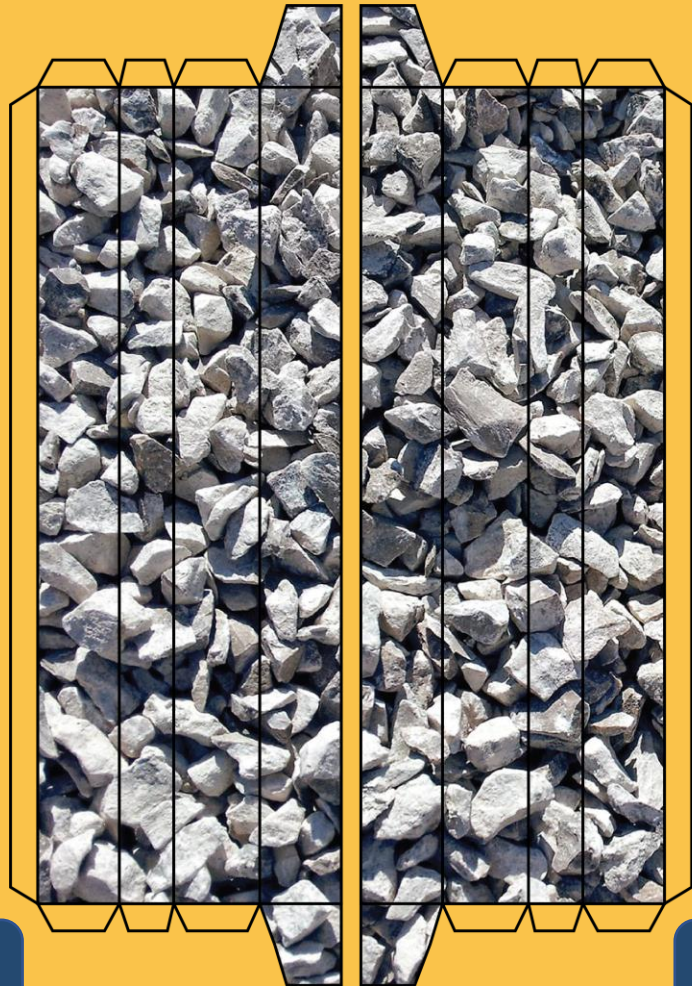
# Ballast



Dimension of Railway track

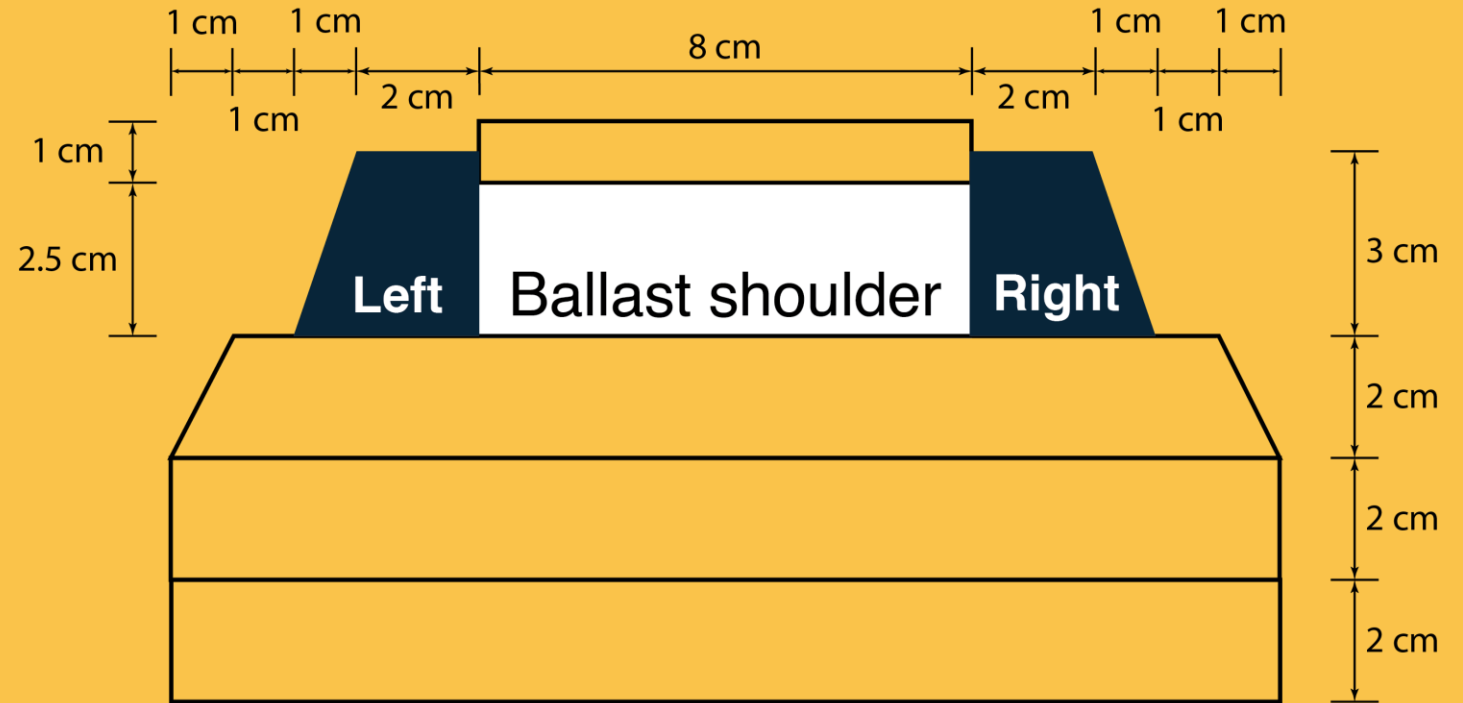


# Ballast Shoulder



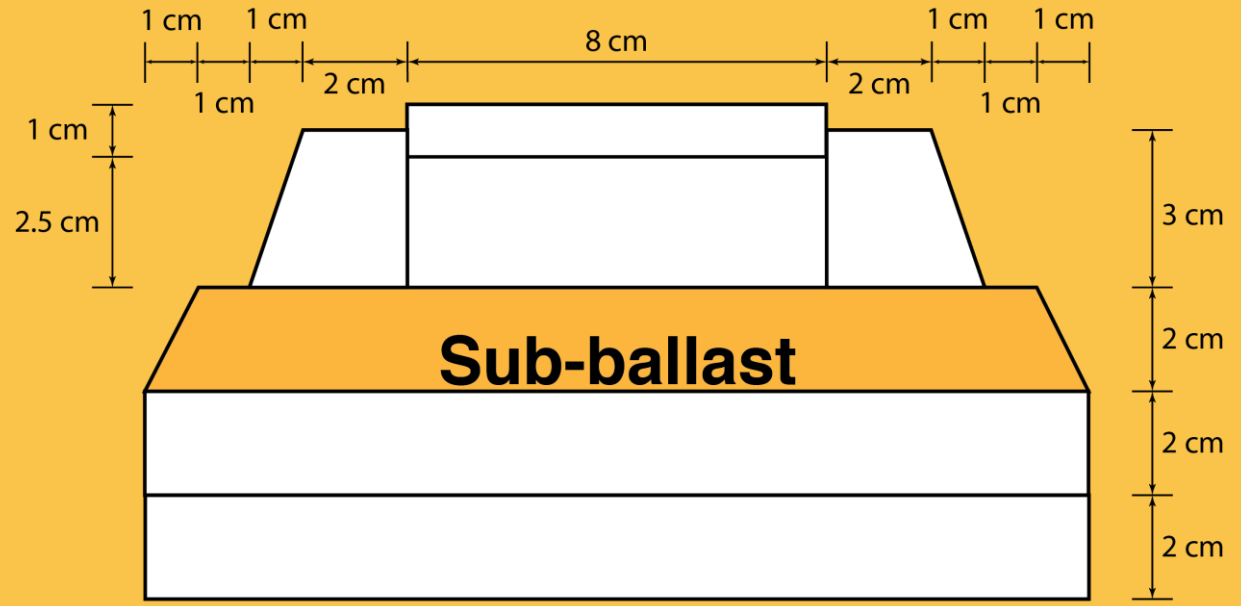
Left

Right



Dimension of Railway track

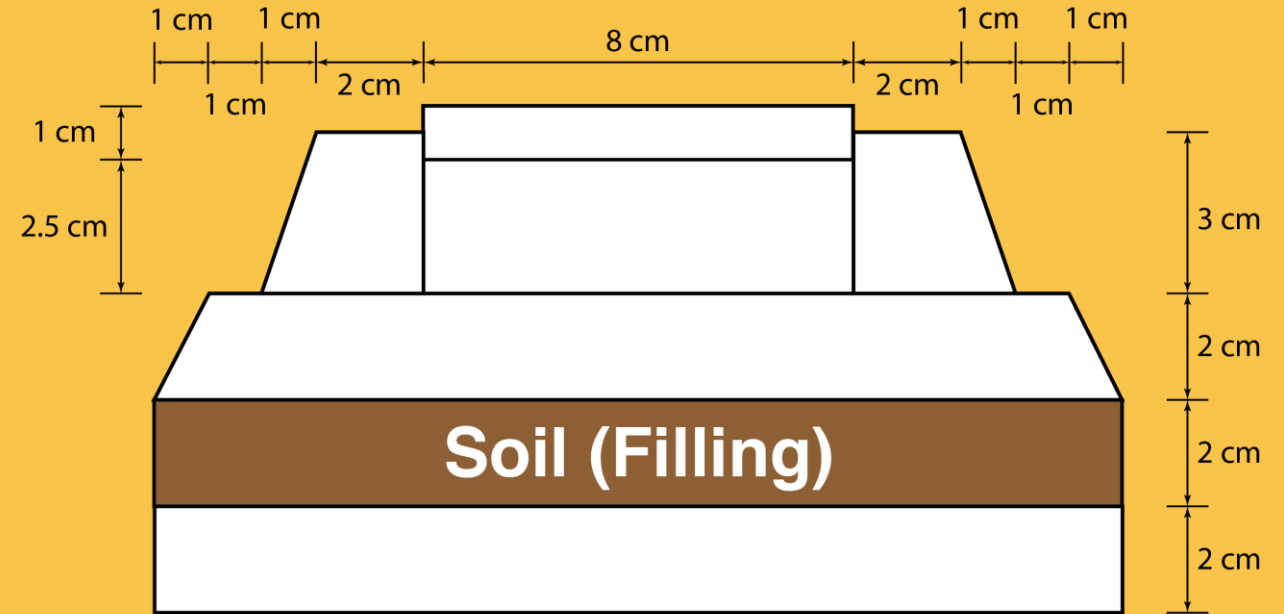
# Sub-ballast



Dimension of Railway track



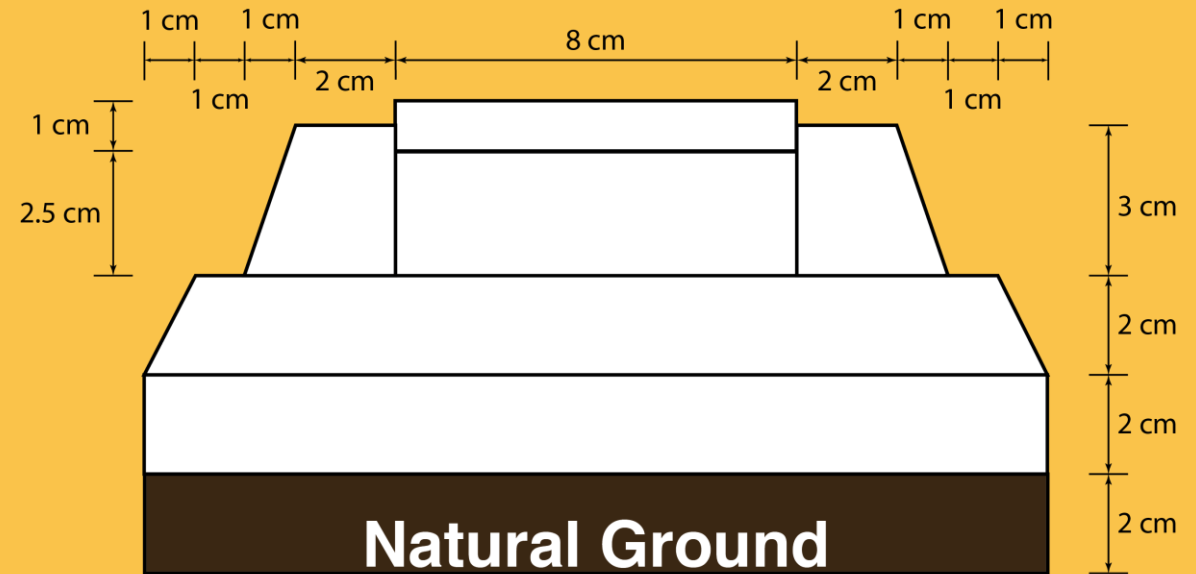
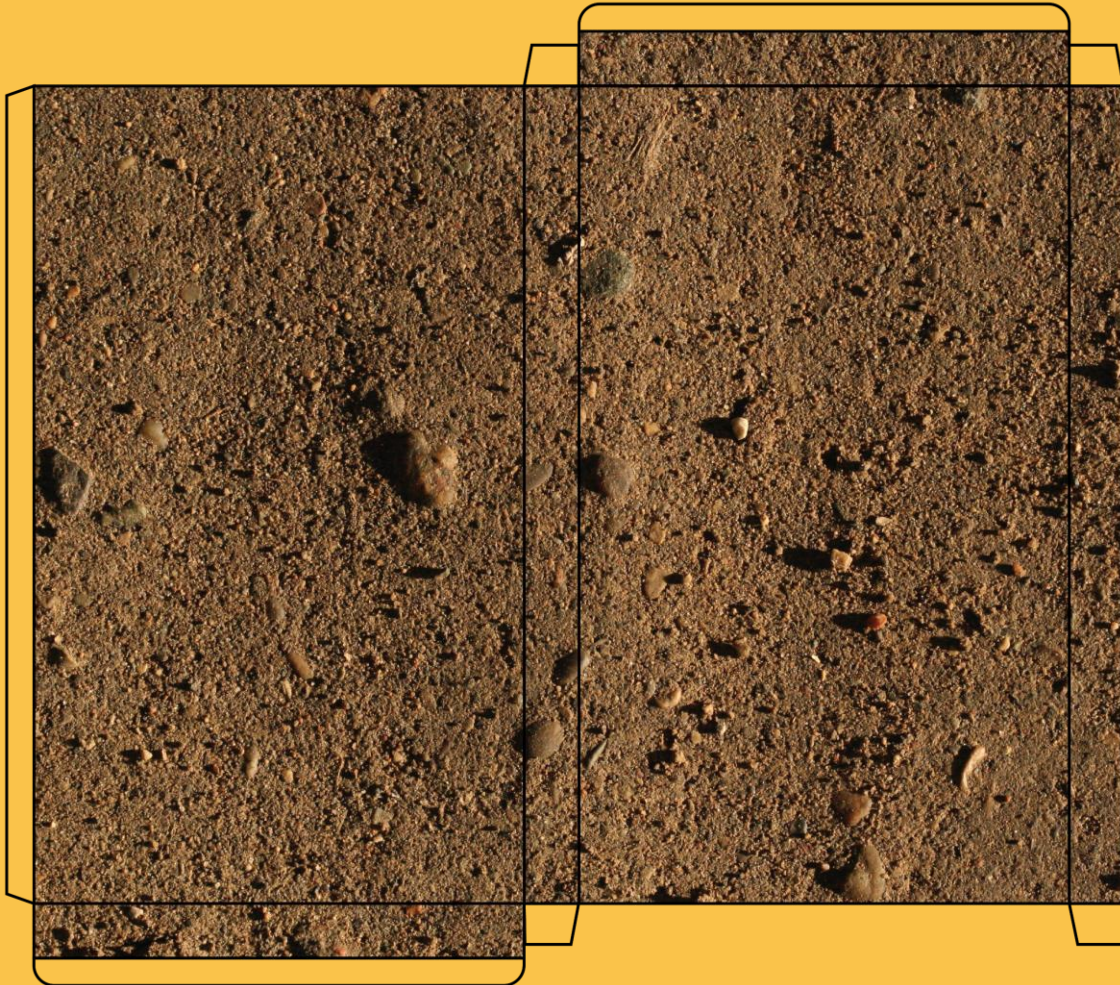
# Soil (Filling)



Dimension of Railway track



# Natural Ground



Dimension of Railway track



## Tools

- Glue
- Scissor
- Popsicle sticks of sleepers
- Wood Sticks of rails
- Wire holder
- Screw
- Watercolour

