



C57

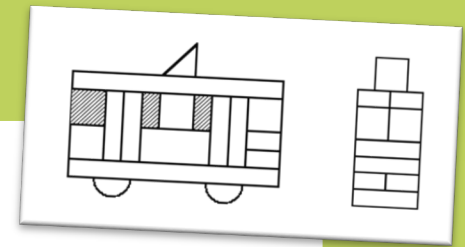


20-25 minutes

AND MORE TRAMS



To develop the ability to analyse the structure of an object - the shapes, relative sizes and spatial relationships between the main functional features
 To foster spatial awareness - the ability to match a plan to a real structure
 To establish the ability to construct an object conforming to diagrams showing two different views (detailed front-view and detailed side-view diagrams)
 To foster self-regulation - choose the blocks first and plan the build sequence required

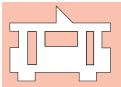


FROM YOUR BLOCK SET

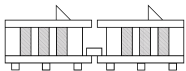
❖ Access to all the blocks



❖ A Ghost Diagram of a tram



❖ Side-View Diagram of 2 connected trams



❖ 2 sets of detailed diagrams with a matching front-view and side-view diagram for a different tram in each set



❖ The Ghost puppet from C20



Note: As before, don't let your child see these pages before or during the session.

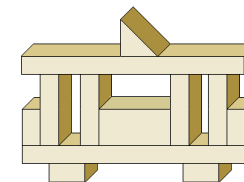
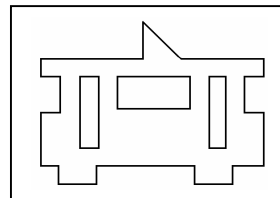
2D Ghost Tram (Building According to a Ghost Diagram)

Produce the Ghost puppet and show your child the Ghost Diagram of a tram. Explain that this time the Ghost wants to challenge them to build from a 2D Ghost Diagram.

Ask your child a series of questions to help them analyse it, as in previous sessions: *What could this be? Who uses it? What is it for? Are we looking at a front, top or side-view? What are the component parts? Where are they on the diagram? Why are they important?*

Ask your child to think about how to transform the Ghost Diagram into a real 3D structure. Help them as necessary with questions such as: *Which blocks will you need? Which bit will you build first? How will you connect the different blocks?*

Now ask them to first choose all their blocks, and then build their own tram to match the Ghost Diagram.



CONTINUED ON THE NEXT PAGE



Your child can plan their trams and choose the required blocks before they build them.
 Your child find their own solutions to the 'problem' of constructing a structure without detailed information.
 Your child can build trams conforming to diagrams showing two different views (detailed front-view and detailed side-view diagrams).
 Your child can build at least one tram based on a schema.
 Your child can use the language of spatial orientation appropriately (e.g. over, under, next to, across, on both sides, opposite, beyond).



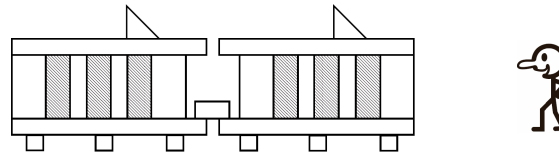
KEY TO LEARNING @HOME

AND MORE TRAMS – continued



Nosy Neighbour (Building According to a Detailed Side-View Diagram)

If you have more than one child doing this, have them work together on this part of the session. Explain to your child that they will be tram builders again now. Give them the following building blocks: 4 bricks, 4 cuboids, 4 long boards, 6 quarter-cubes, 1 half-cube and 2 small prisms. Put out the Nosy Neighbour (side-view) diagram shown and ask them to build two connected trams according to this diagram:



From Two Views (Building According to Detailed Side-View and Detailed Front-View Diagrams of the Same Object)

Give your child access to the full set of building blocks. Now show your child the two detailed diagrams below. Ask them if they can see what they represent and confirm that one is the Nosy Neighbour view of a particular tram, i.e. from the side, and the other is the Camera Shot view, i.e. from the front. Challenge your child to build the one tram that is shown in both diagrams. If necessary, support them with choosing their blocks and then checking/comparing what they are building against both diagrams as they go along:



If you have two children doing this session, the other child can use the other set of diagrams for a second tram provided, so that each builds completely independently. Or you can use the second set of diagrams for your child to have another go at the same process.



One Schema – More than One Tram (Interpreting One Schema in Different Ways)

Give your child access to the full set of building blocks. Show them the schema of a tram here and challenge them to build a tram according to this schema, but that is completely different to the others they have built during this session. Let each child doing the session build their own. If you only have one child doing the session, build a tram yourself too, so there are at least two finished ones to compare. They can build more than one tram if they wish to.

Admire the finished trams and discuss the differences between them whilst noting the underlying structural similarity from being based on the same schema. Summarise by reminding your child that it is possible to interpret one schema in many different ways.

