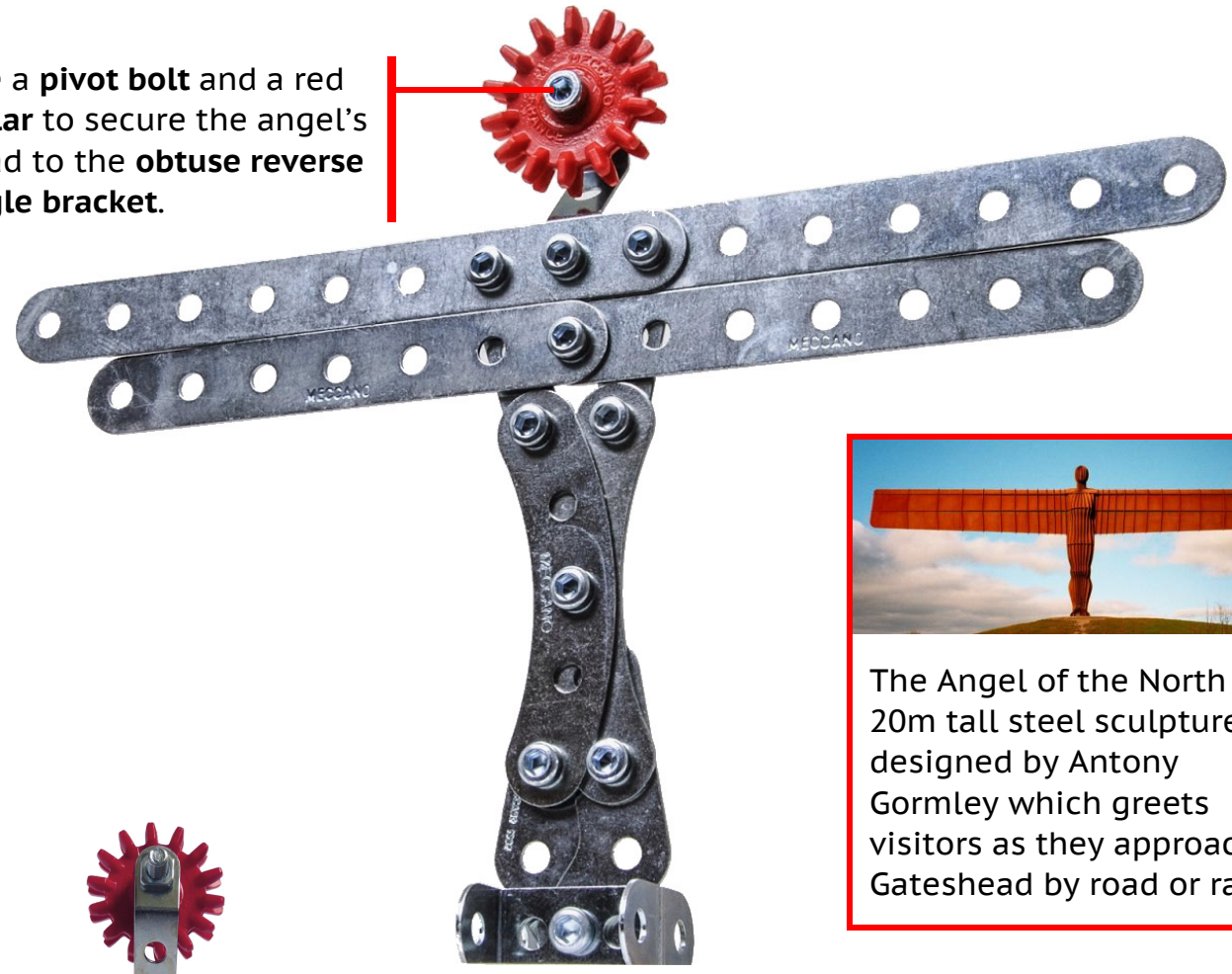
MAKE IT WITH MECCANO

The Angel of the North

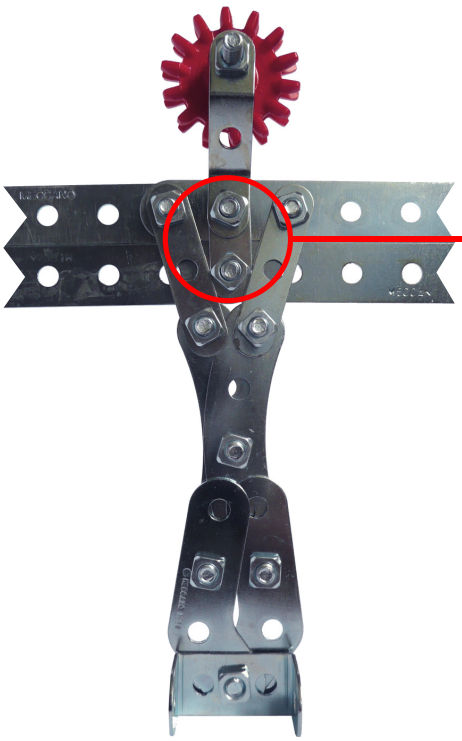
Moderate 30 minutes

➔ Start building from the **base** and work upwards. There are several overlapping parts at unusual angles, so don't tighten the nuts fully until you are confident that all the parts will fit.

Use a **pivot bolt** and a red **collar** to secure the angel's head to the **obtuse reverse angle bracket**.



The Angel of the North is a 20m tall steel sculpture designed by Antony Gormley which greets visitors as they approach Gateshead by road or rail.



Underneath here, a **2 hole strip** is used to secure the strips that make up the angel's wings.

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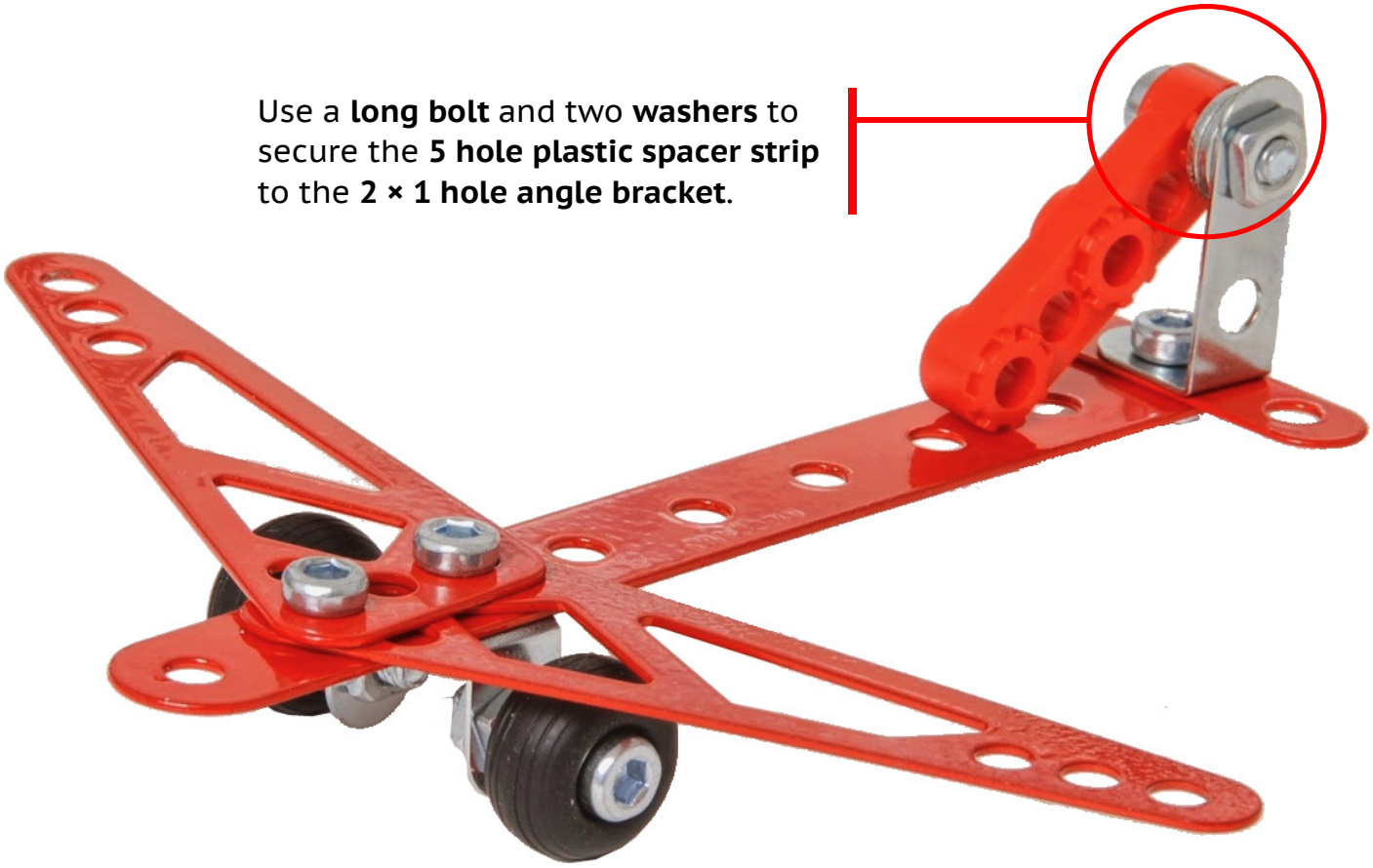
Aeroplane

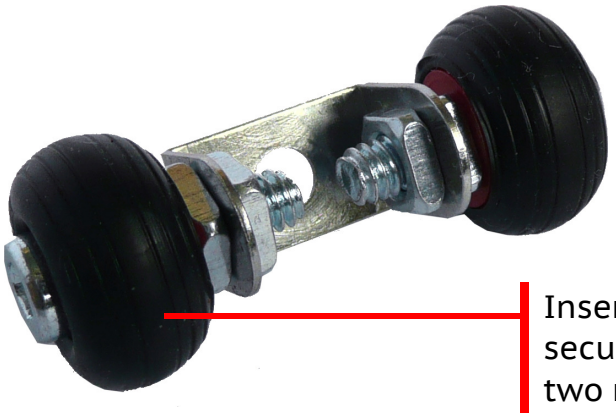
Easy 15 minutes

➔ Start by building the **undercarriage**, then secure it to the **fuselage** along with the **wings**. Finally, add the **tail**.

Have a go at adding an engine and propeller to your aeroplane.



Use a **long bolt** and two **washers** to secure the **5 hole plastic spacer strip** to the **2 × 1 hole angle bracket**.



Insert a red **collar** into each **tyre** and secure them using a **pivot bolt** and two **nuts** so that they are free to turn.

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Baby Robot

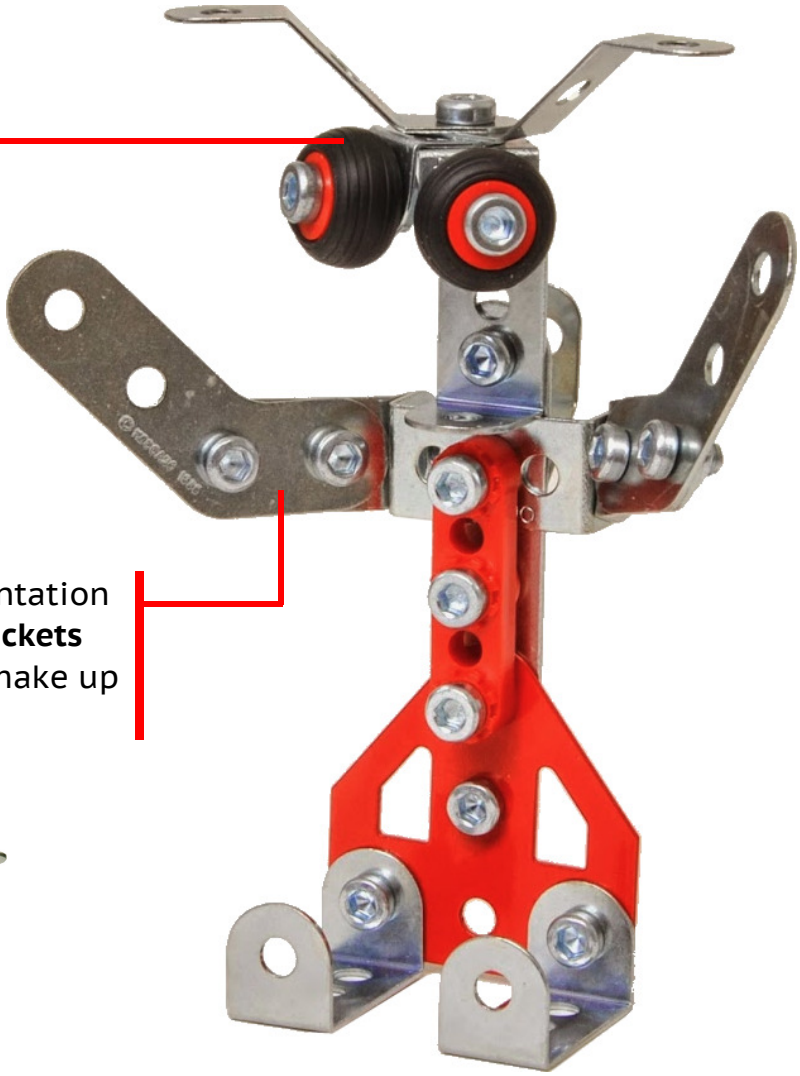
Moderate 30 minutes

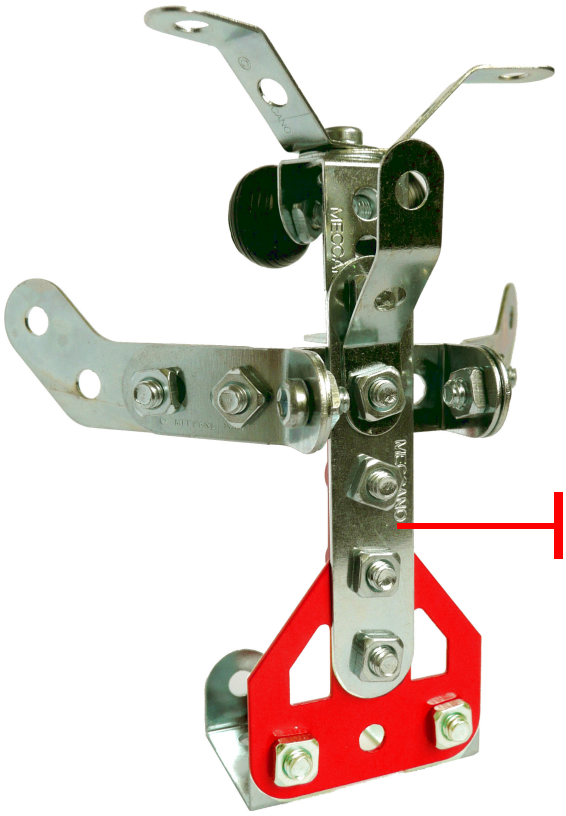
➔ Start building from the **feet** and work upwards. There are several overlapping parts, so don't tighten the nuts fully until you are confident that you have them all in the right place.

To make each eye, insert a red **collar** into a **tyre** and secure them using a **long bolt** and two **nuts** to an **angle bracket**.

Once assembled, secure the eyes along with the antennae to the **3 × 1 hole double angle bracket**.

Take a moment to check the orientation of the **2 × 1 hole obtuse angle brackets** and **obtuse corner brackets** that make up each of the robot's arms.





This is a **5 hole strip**.

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Baby

Easy 10 minutes

➔ Start building from the **feet** and work upwards.

Use two **washers** to create space between the **2 × 1 hole obtuse angle brackets** and the **obtuse reverse angle bracket**.

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Cactus / Redwood Tree

Easy 5 minutes

➔ Both of these models use the same design for their base. Start building them from the **base** and work upwards.

Have a go at building another type of plant or flower.

Use two **3 × 1 hole double angle brackets** back-to-back to form the base.

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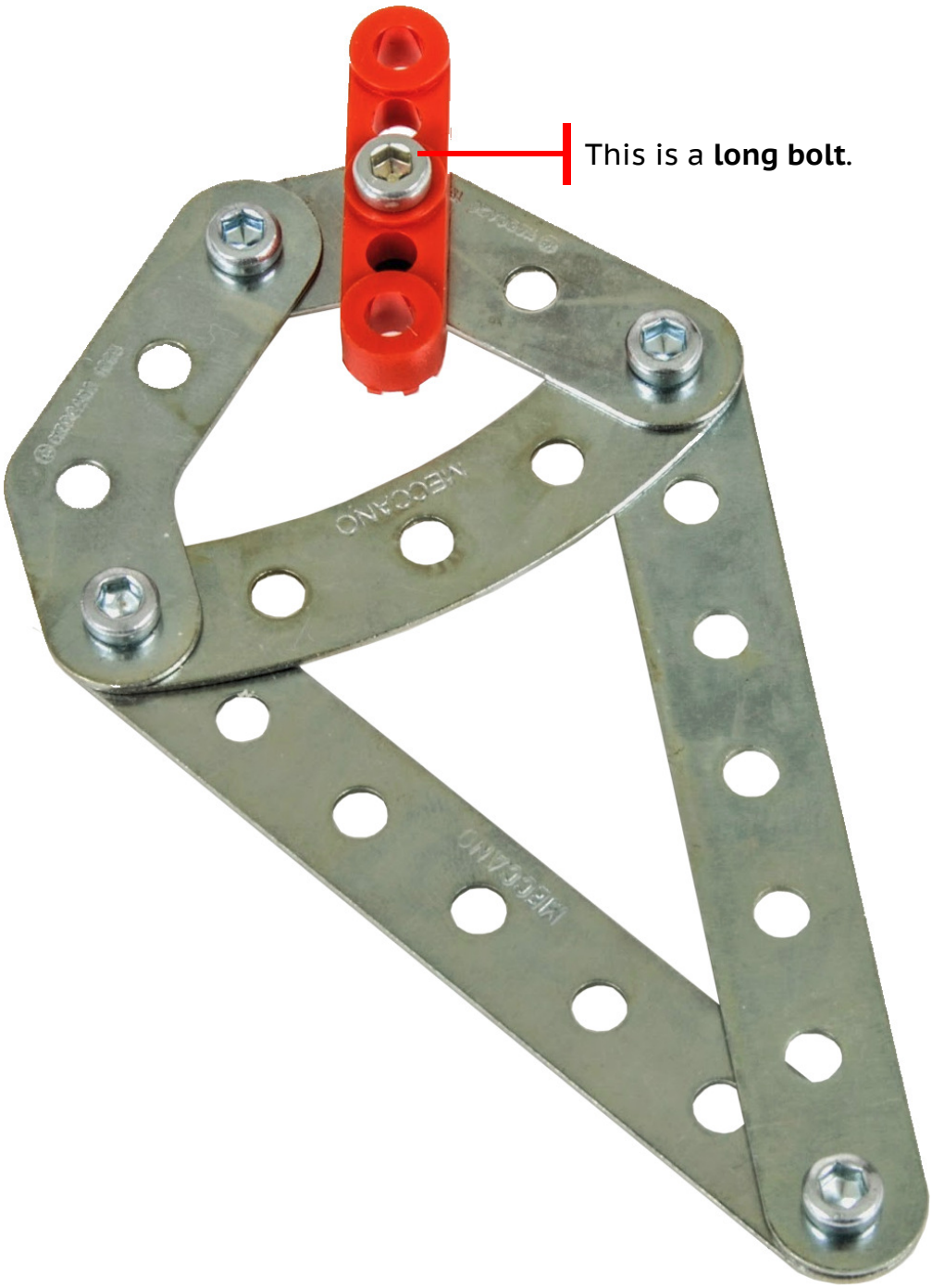
Ice Cream Cone

Easy 5 minutes

➔ Start building from the bottom of the cone and work upwards.

Have a go at 'drawing' another object with Meccano parts.



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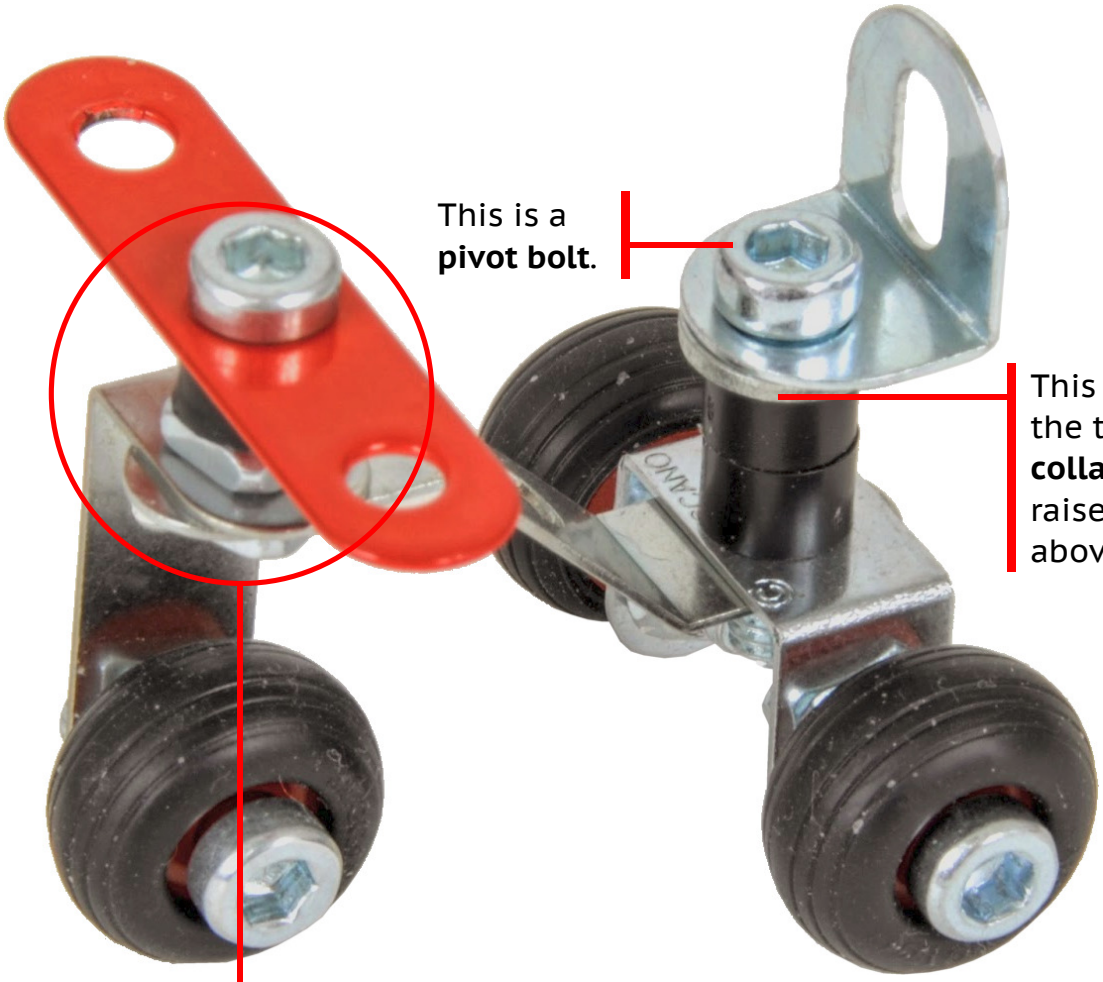
Tricycle

Easy 20 minutes

➔ Start by building the **wheel assemblies**, then secure them to the **frame**, **seat**, and **handlebars** using a long bolt and a pivot bolt.

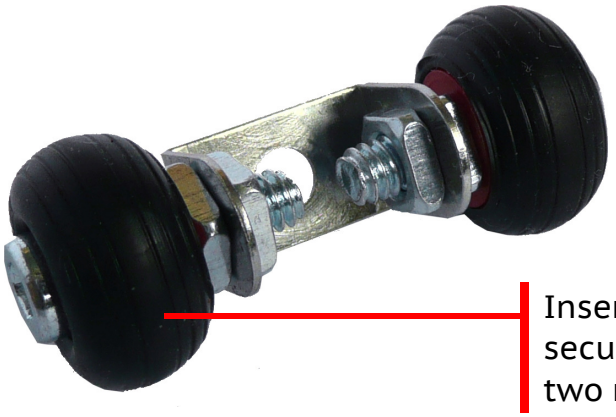
Have a go at making your tricycle's steering functional.



This is a **pivot bolt**.

This **washer** and the two black **collars** below it raise the seat above the frame.

Use a **long bolt**, a black **collar** and two **nuts** to secure the **3 hole strip** to the **obtuse reverse angle bracket** and the **2 × 1 hole angle bracket**.



Insert a red **collar** into each **tyre** and secure them using a **pivot bolt** and two **nuts** so that they are free to turn.

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Aeroplane / Helicopter

Moderate 45 minutes

➔ These models are from the **Aerobatic Plane 3 Models Set**, one of the sets in the Meccano **Multimodels** range.

The set is one of many Meccano products available from toy shops and online retailers.

➔ To build these models, please ask us for the step-by-step instructions that come with the set.

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