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KA220-SCH - Cooperation partnerships in school education





Simple & Powered Machines

Pulleys

We haven’t talk about pulleys yet. I see them in front of me the whole time!

Oh, I made a toy with pulleys yesterday!

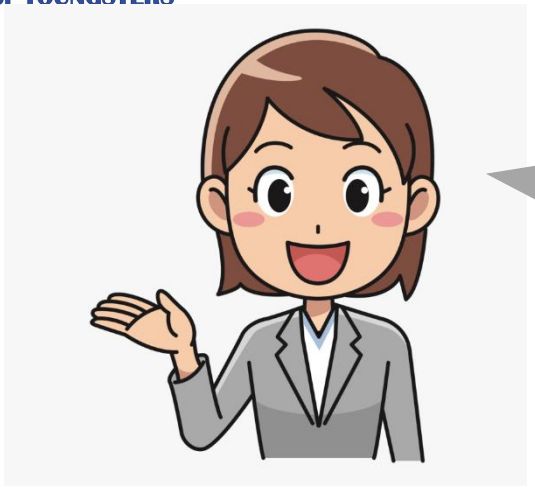
A neighbor of mine does not get down for shopping, and she has a pulley system to lift her shopping!



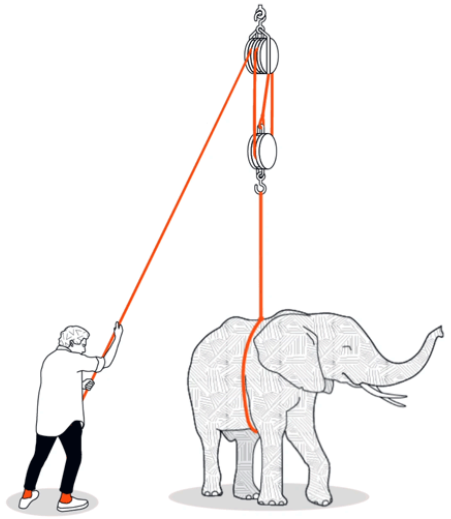
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Can you think how the pulleys work?





Pulleys have also been used since Ancient times.





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Pulleys are circular disks that rotate around axles that pass through their center. Along their circumference there is a groove through which a rope passes.

What is a pulley and how does it work?



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Make sure your students understand the video.

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Pulleys





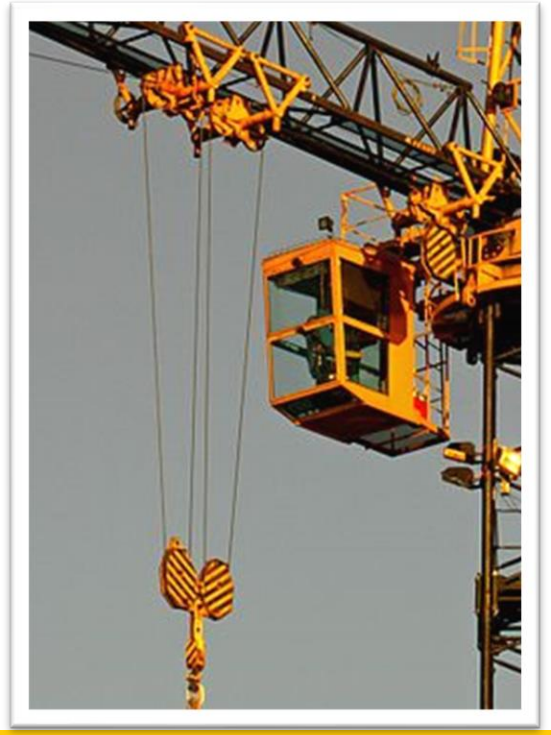
Can you think of objects that have pulleys?









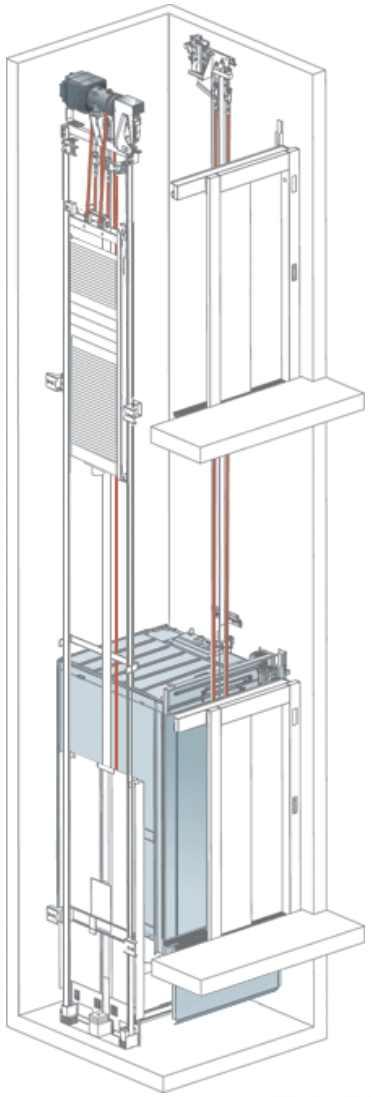


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Let your students suggest objects with pulleys before you talk about the pictures.

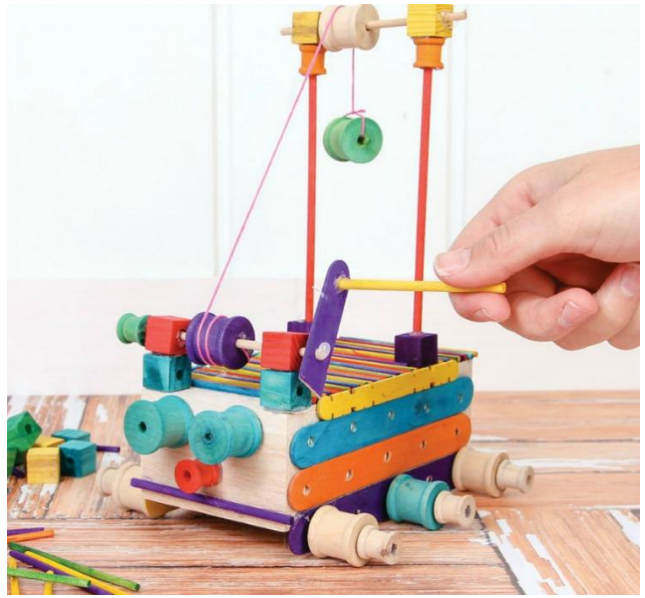
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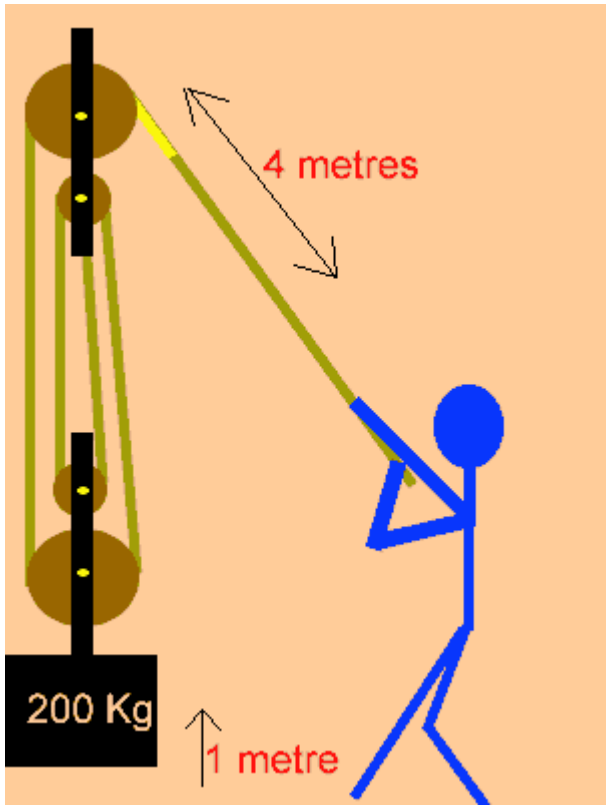
Think of these objects as well!



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Why do we prefer to use more pulleys, and use more rope?



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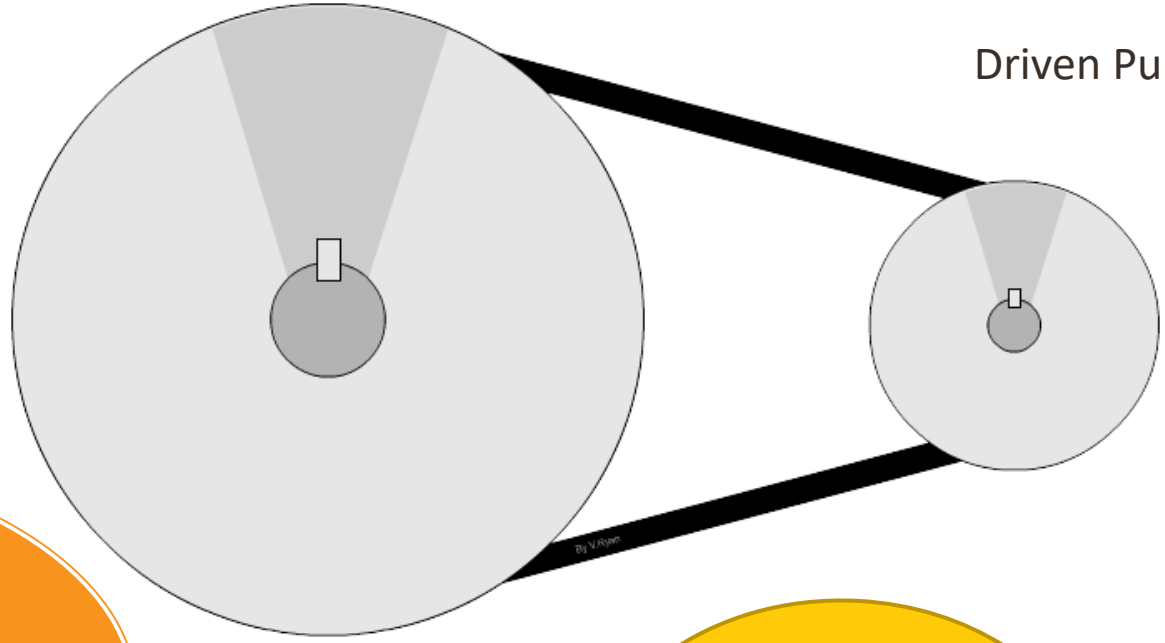
Mention that with many pulleys the exerted force is less.

Pulleys



Driver Pulley

Driven Pulley



When we have more than one pulley, one is called driver pulley (the one we rotate) and the other is the driven pulley (the one that rotates by itself).

Do they move in the same of different direction?



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How can we make a pulley?

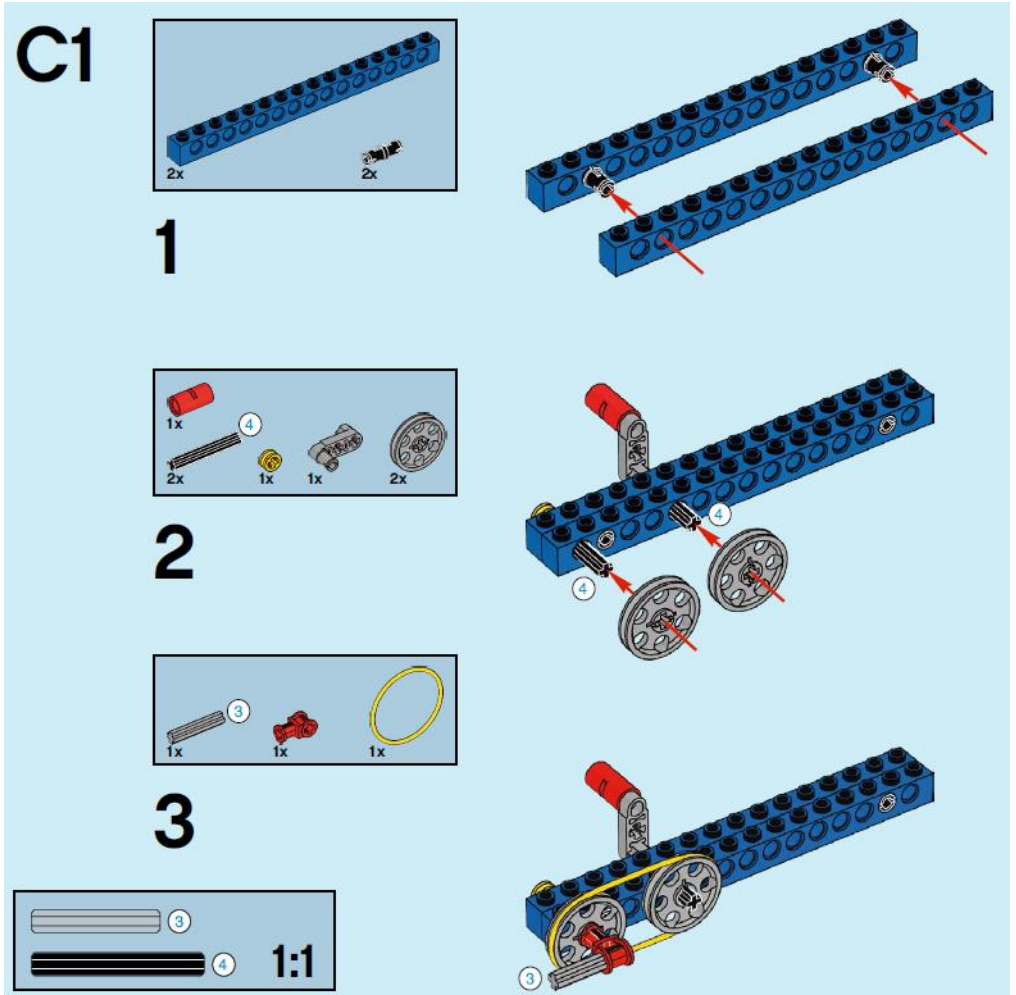


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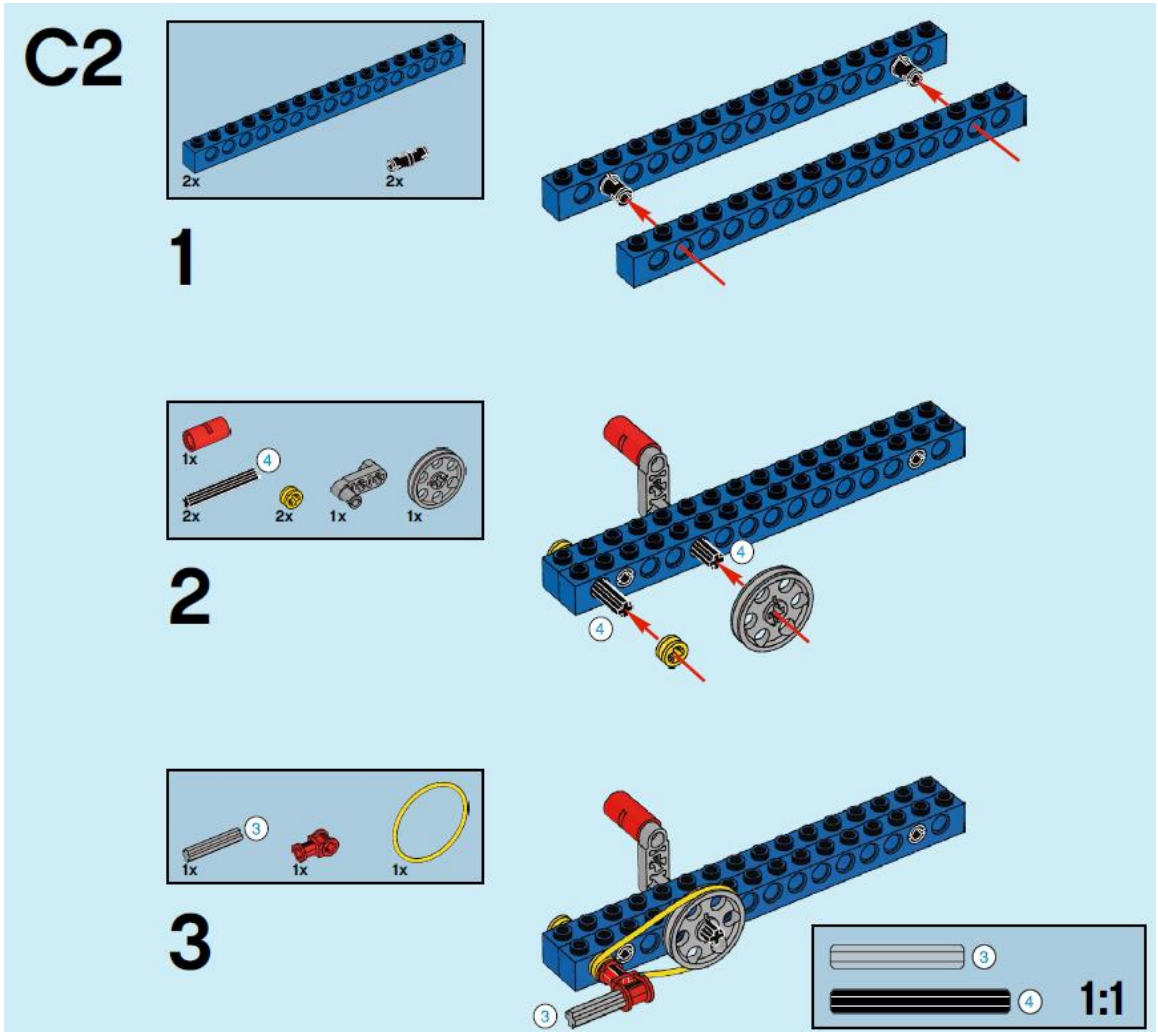
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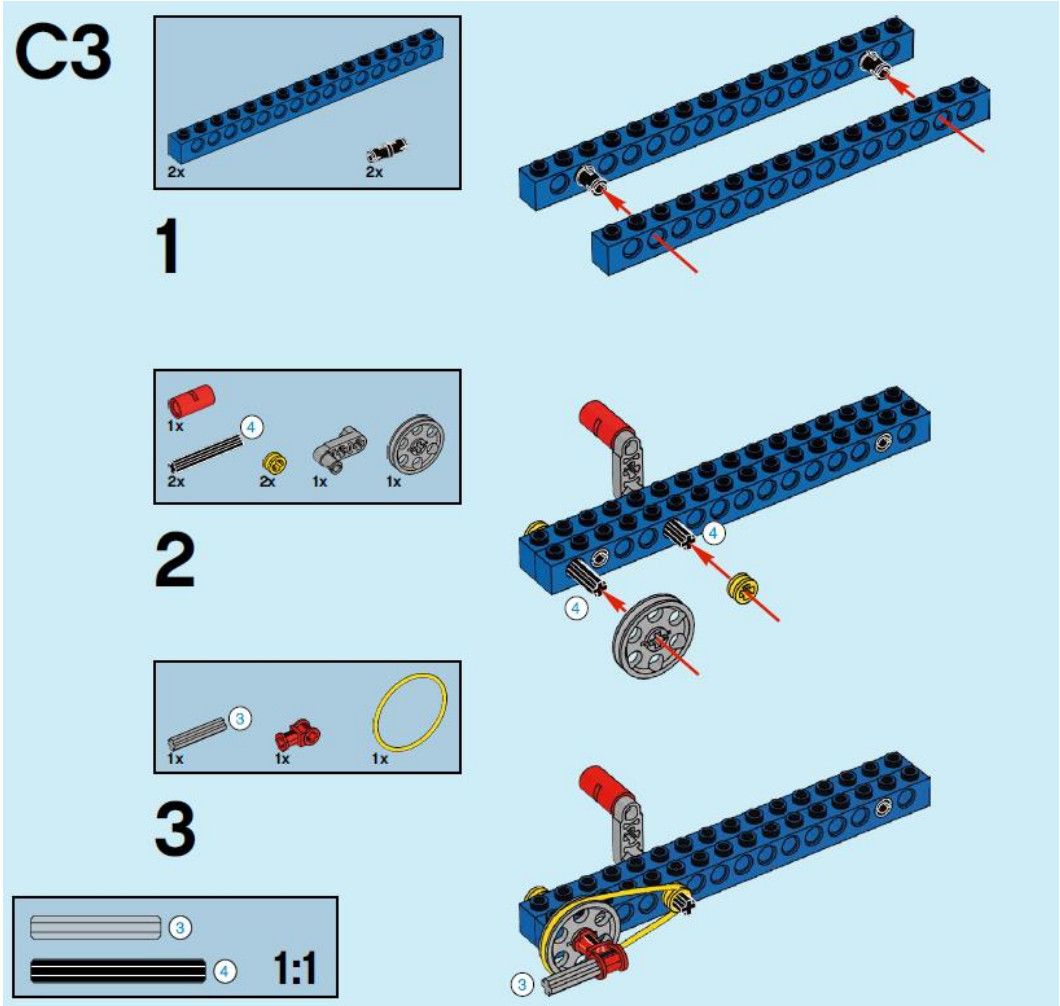
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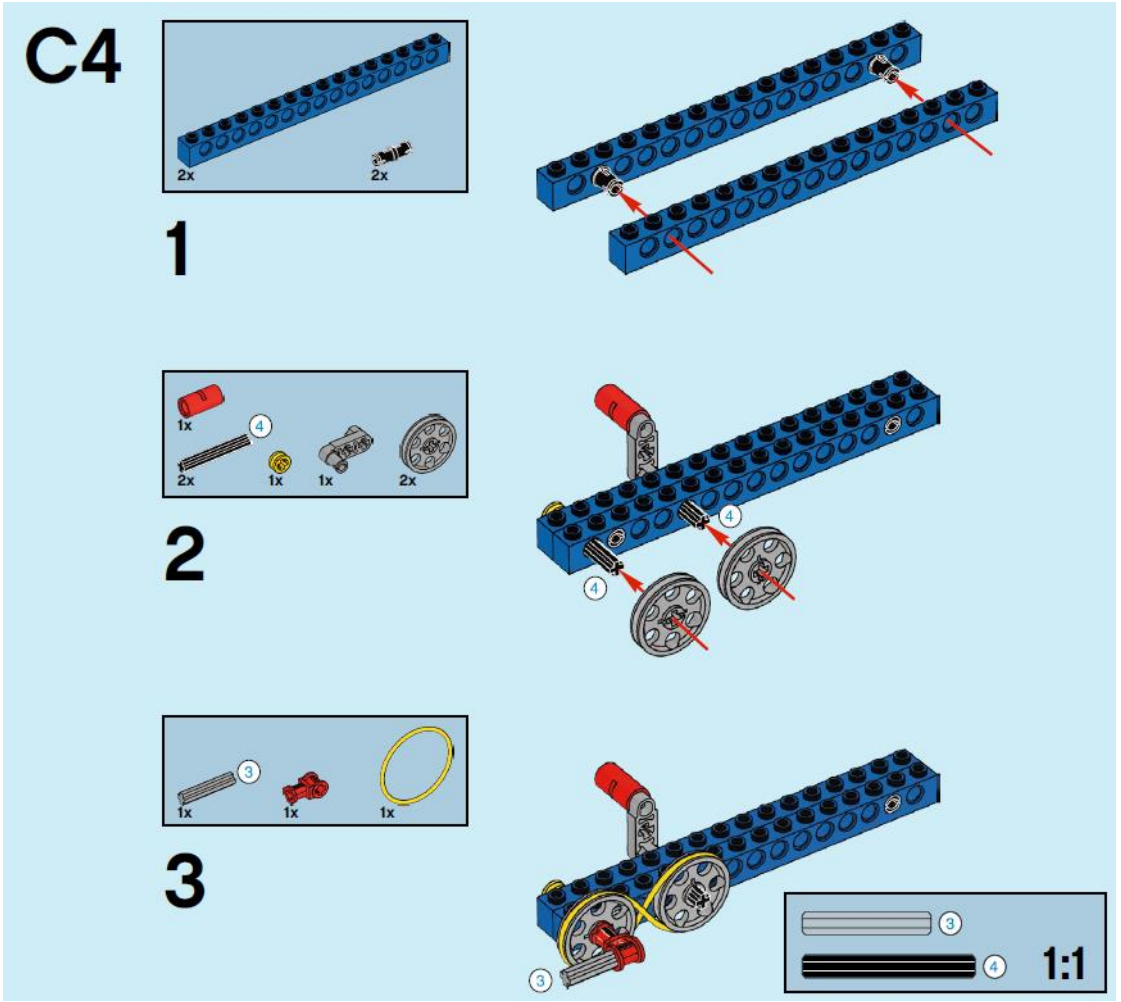
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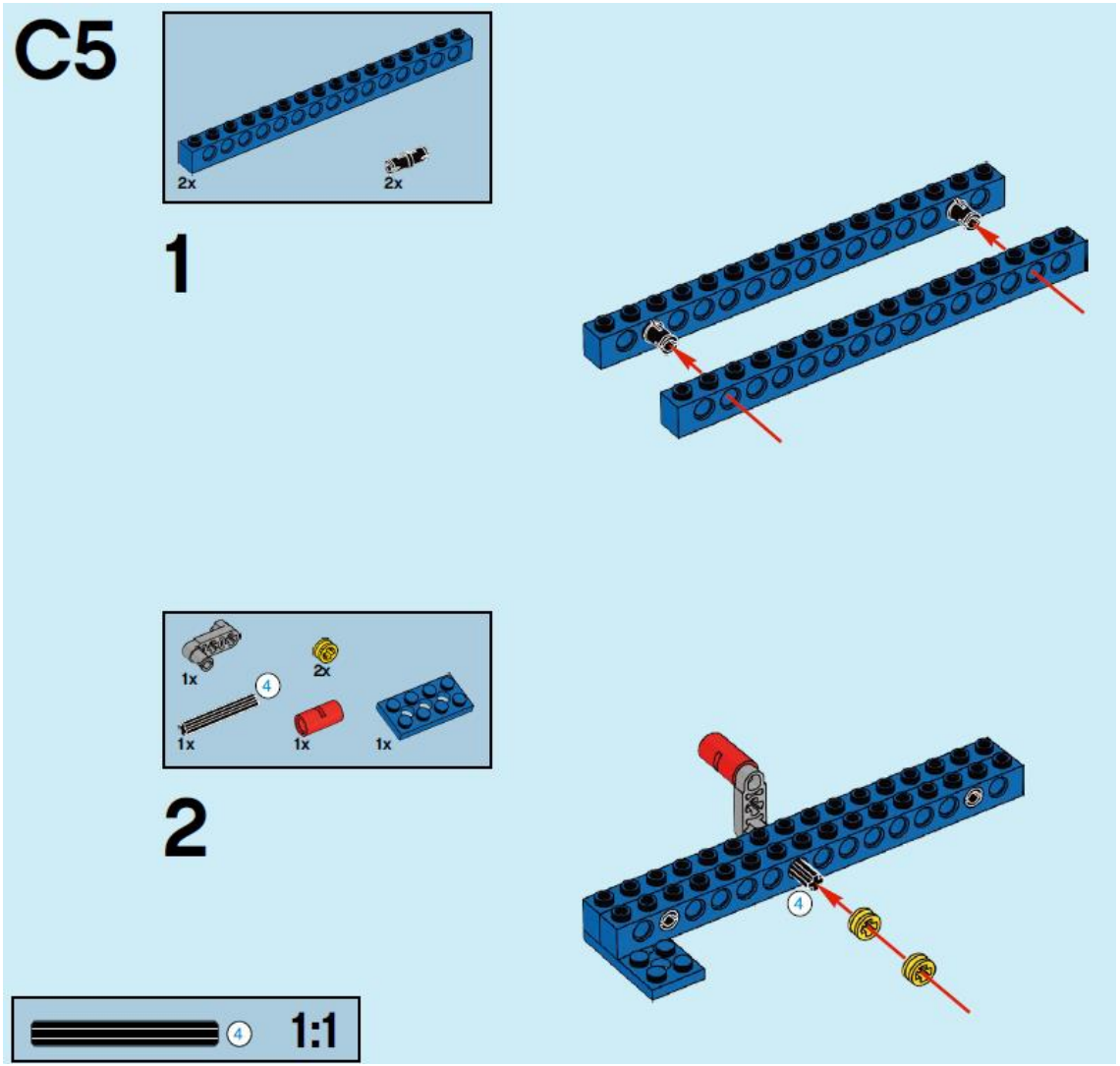
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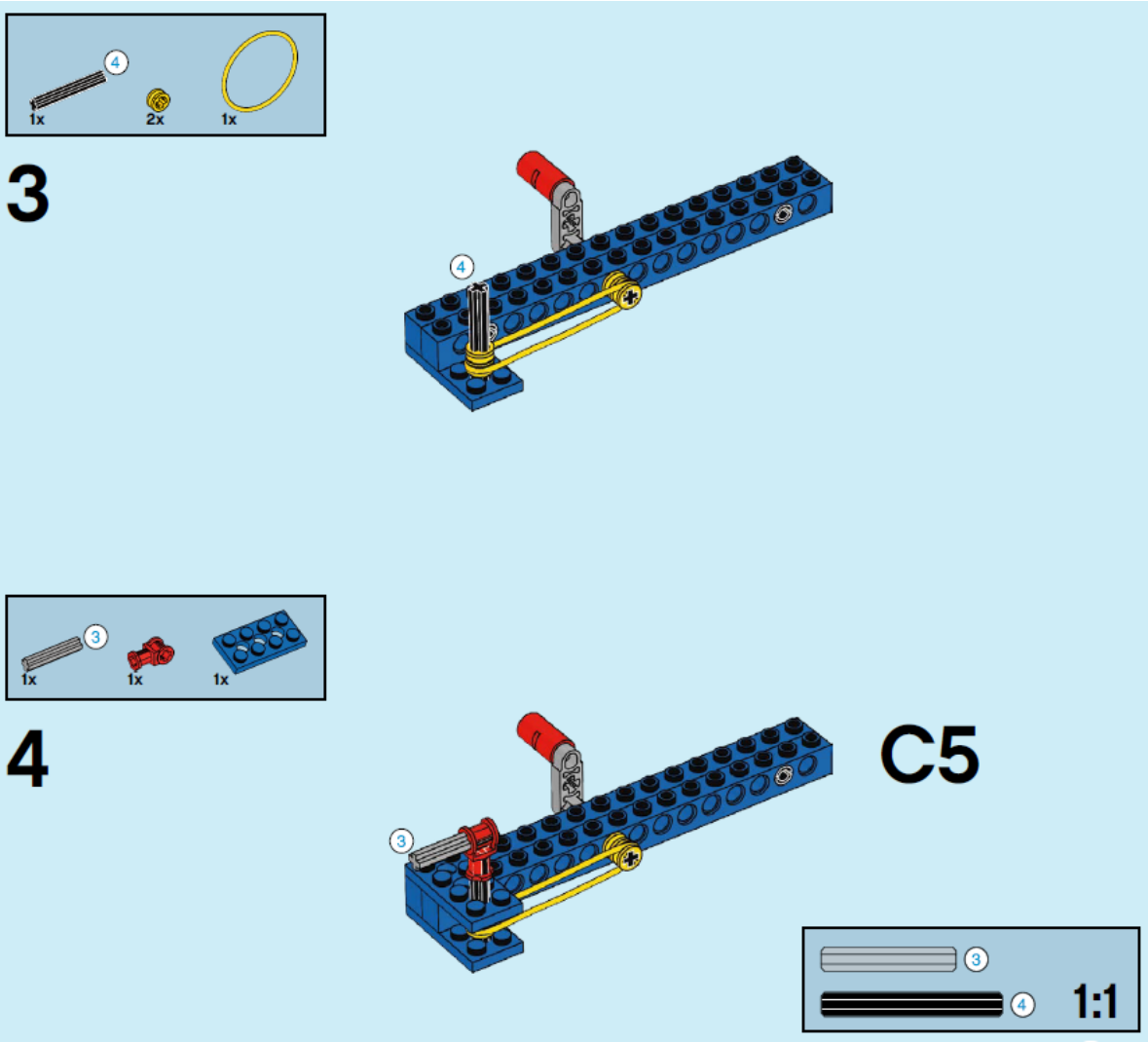
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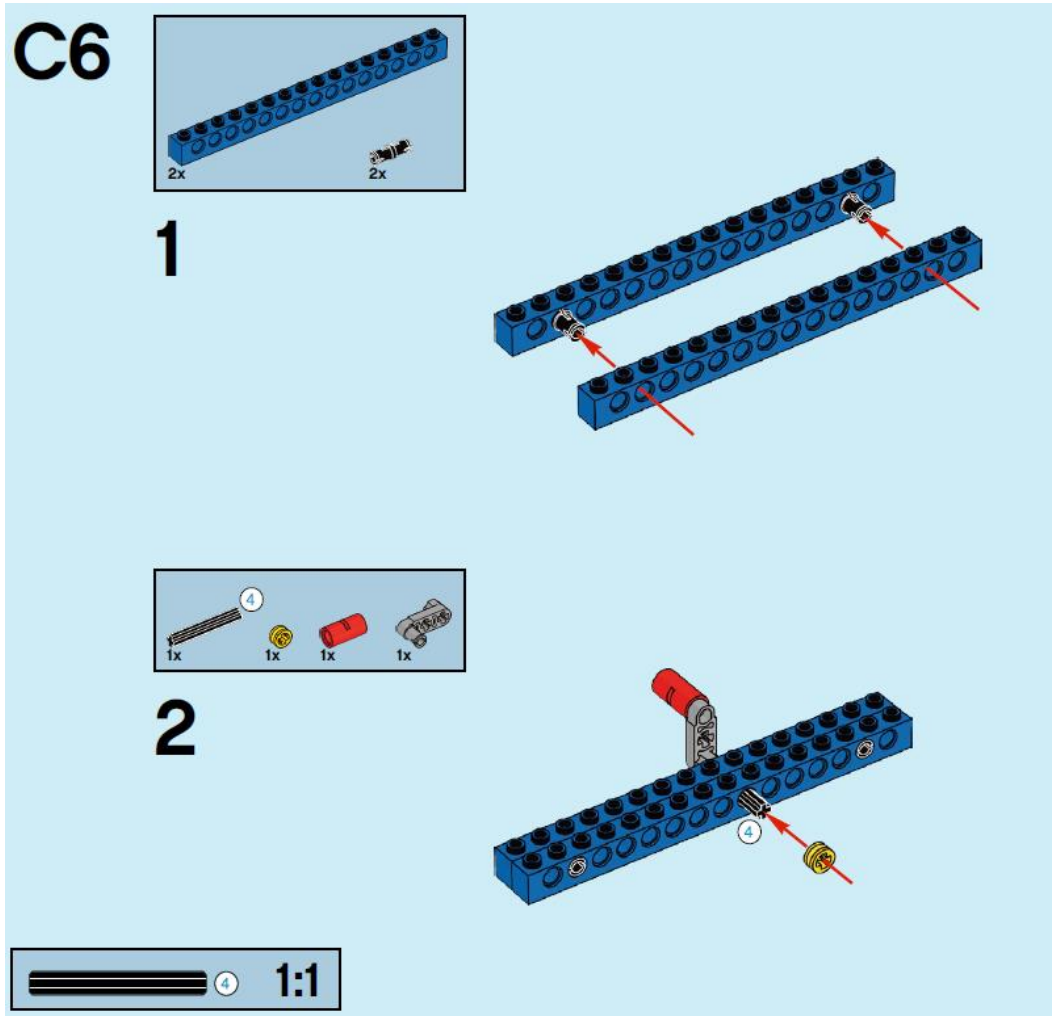
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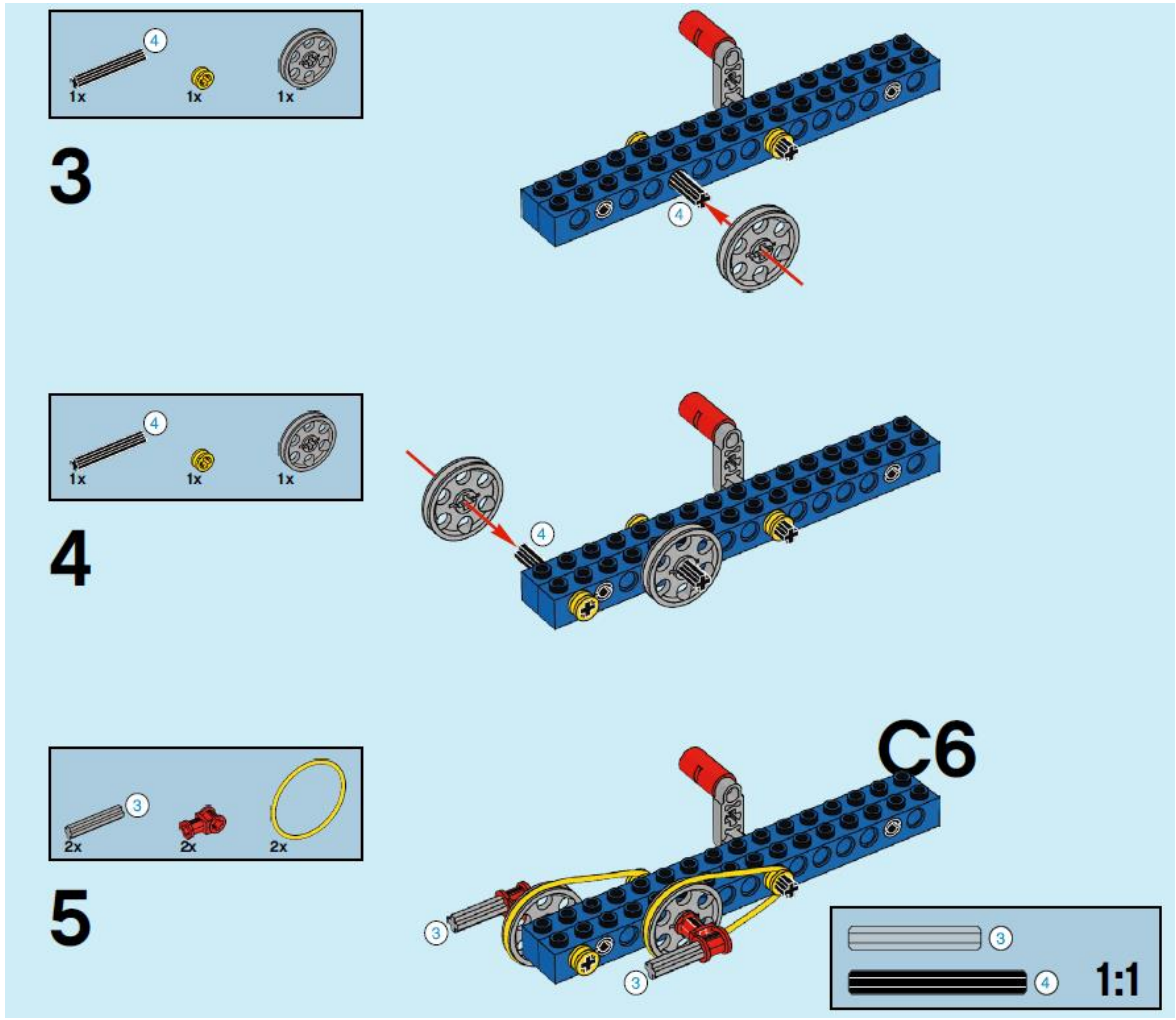
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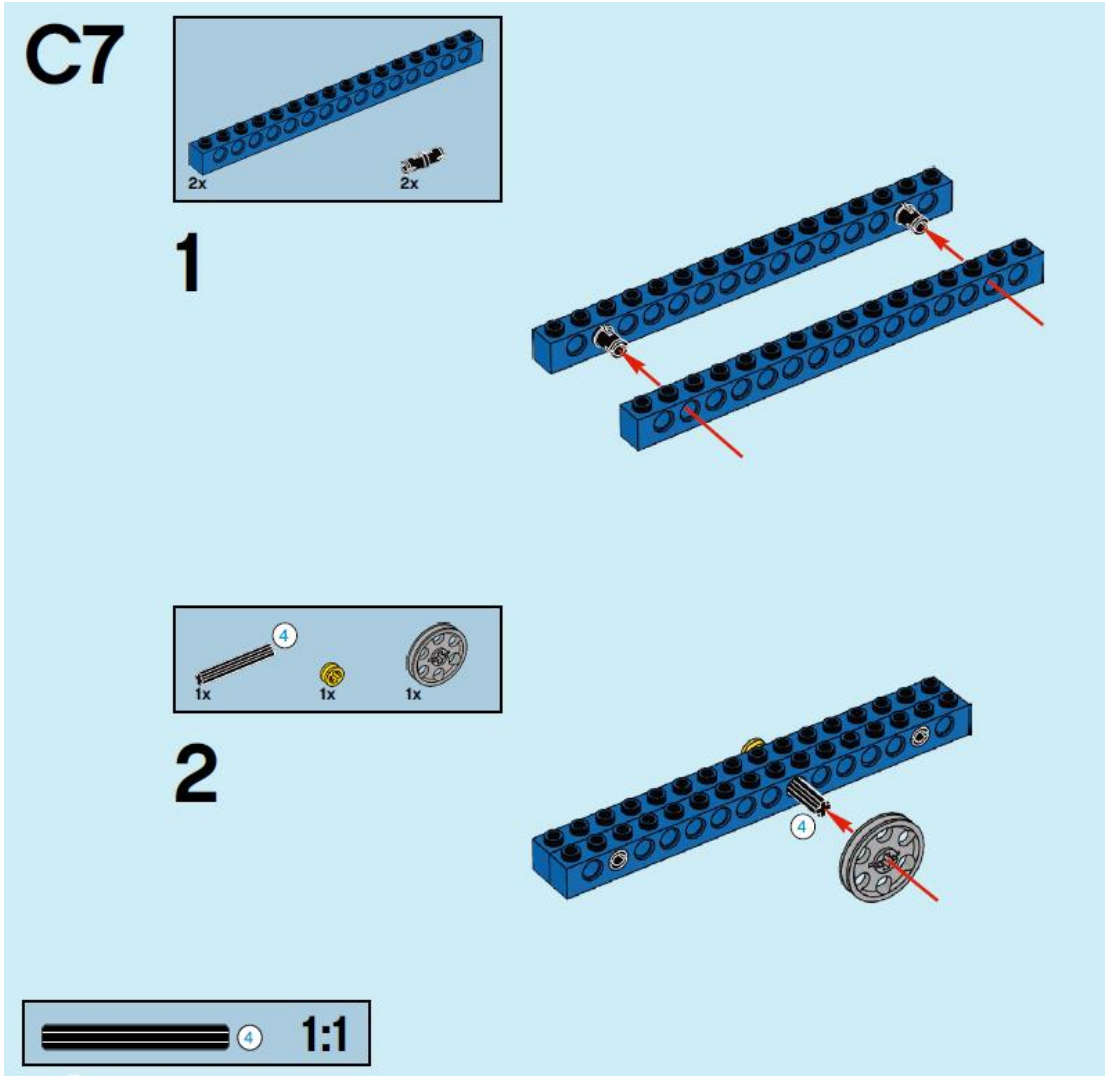
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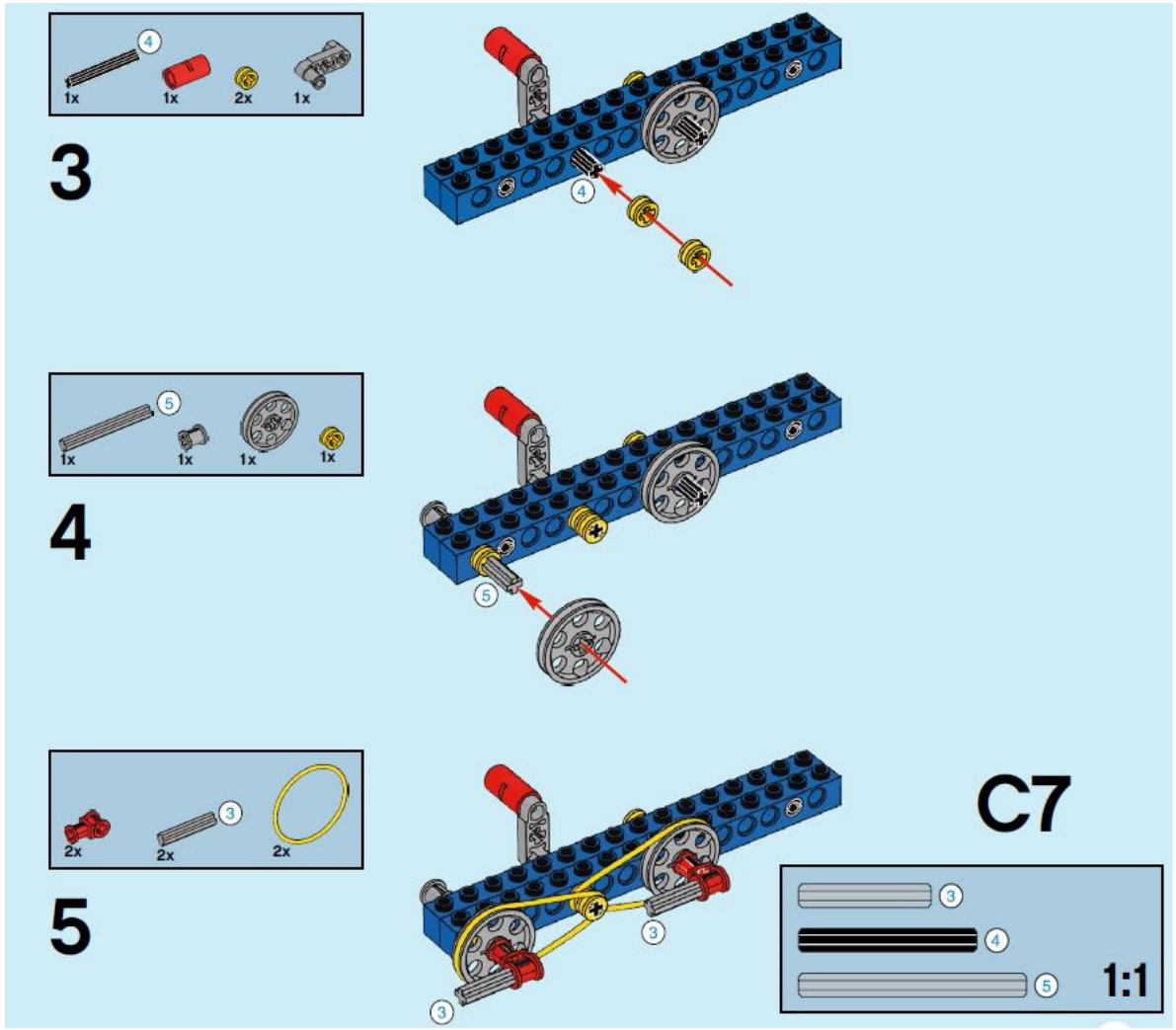
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When you finish your worksheet

disassemble your build

and put all parts in their own place



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