

STEM Simple Machines Set

E96.1 quiz

This set covers the subject of Simple Machines in an encompassing and fascinating way. These mechanisms offer a mechanical advantage and are crucial elements of many machines and devices. They are designed to multiply or reduce force, increase or decrease speed and convert one type of motion to another. The set includes enough parts to create 60 working models that cover the subjects of levers, the wedge, the wheel and axle, the screw, the inclined plane, the pulley, as well as the more advanced gears and linkages! You can find easy-to-follow building digital instructions for all models along with detailed explanations of the different scientific principles applied. The methodology suggested combines theory with innovative experimental activities that lead to hands-on learning and engineering creativity.

Including Themes:

Levers & Linkages

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Wheels, Axles & Inclined Planes

page 05

Pulley Drives

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Cams & Cranks

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Gears & Worm Drives

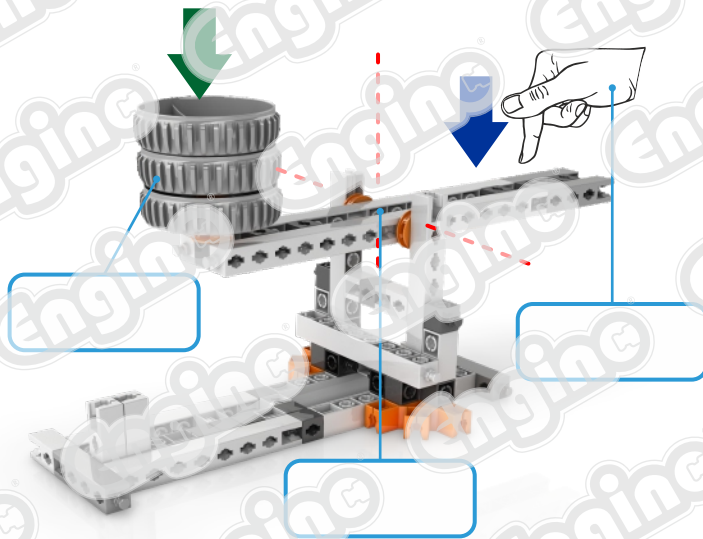
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Levers & Linkages

Exercise 1

Fill-in the boxes using the words: **load**, **effort**, **fulcrum** (1 point)



What class is this type of lever? Write some everyday life examples of the same class of lever (1 point)

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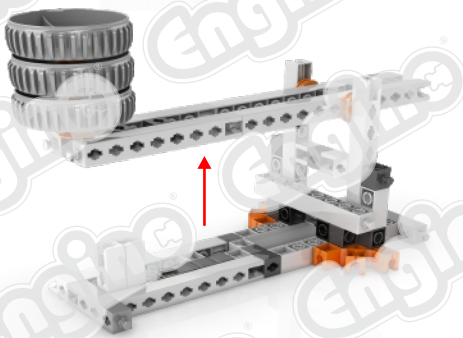
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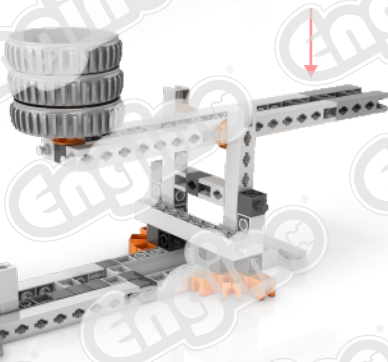
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Exercise 2

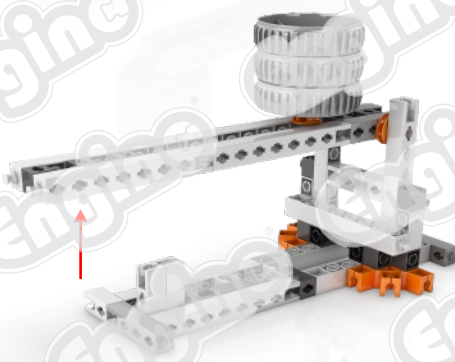
Join the pictures with the correct sentences (1 point)



1 First-class lever



2 Second-class lever



3 Third-class lever

