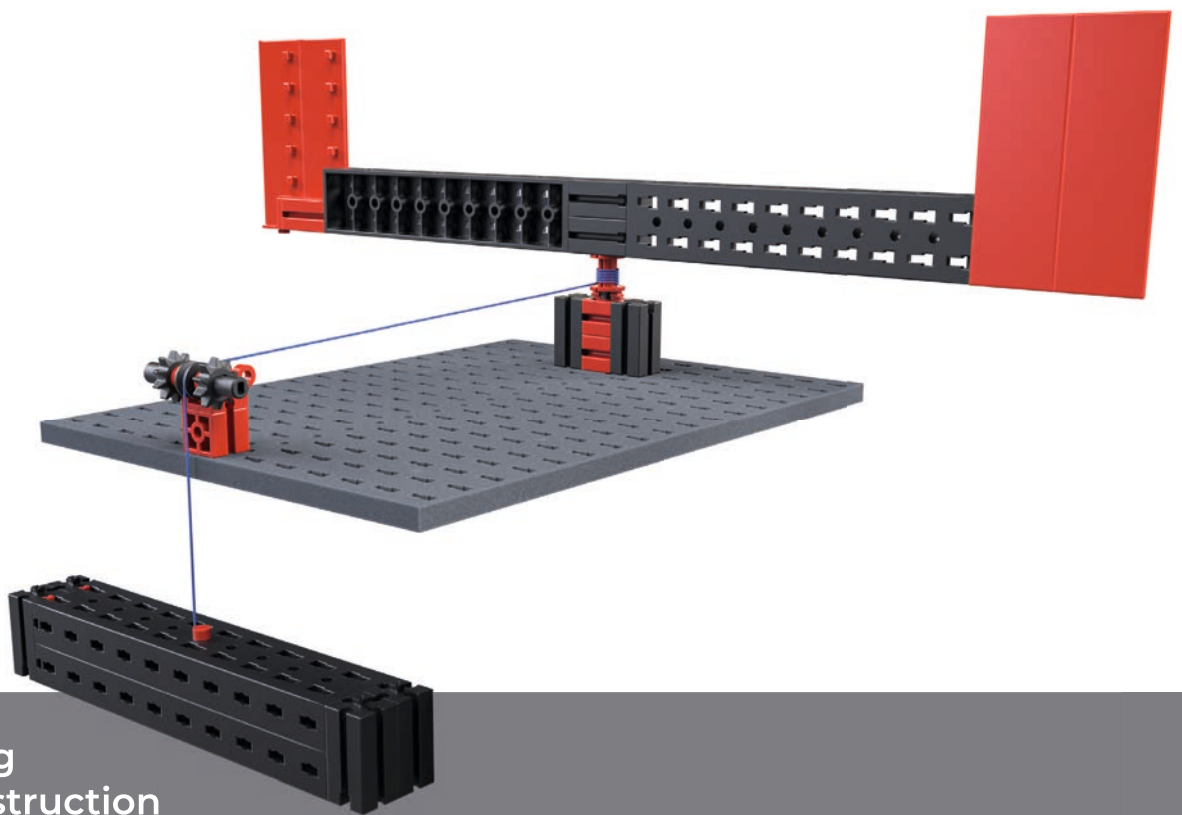


STEM Smart Physics

SECONDARY SCHOOL



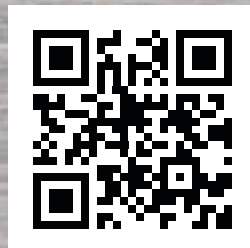
Bauanleitung
Assembly instruction
Instructions de montage
Bouwhandleiding
Instrucciones de construcción
Manual de montagem
Istruzioni di montaggio
Инструкция по сборке
安装说明书

Works with:
phyphox App



- Auf dem fischertechnik eLearning bieten wir Ihnen die Möglichkeit, noch mehr Hintergrundwissen zum Thema des Baukastens zu erhalten und sich umfangreiche didaktische Begleitmaterialien für den Einsatz im Unterricht herunterzuladen. Über <https://www.fischertechnik.de/elearning-stem-smart-physics> gelangen Sie direkt zum eLearning Portal.
- On the fischertechnik eLearning, we offer you the opportunity to obtain even more background knowledge on the subject of the construction kit and to download extensive didactic accompanying materials for use in the classroom. You can access the eLearning portal directly via <https://www.fischertechnik.de/elearning-stem-smart-physics>.
- Avec le portail eLearning de fischertechnik, vous pouvez parfaire vos connaissances au sujet de la boîte de construction. Cliquez sur <https://www.fischertechnik.de/elearning-stem-smart-physics> pour accéder directement à notre portail.
- Met het fischertechnik eLearning portaal geven wij u de mogelijkheid, nog meer achtergrondkennis over het thema van het modulaire systeem te verkrijgen. Via <https://www.fischertechnik.de/elearning-stem-smart-physics> komt u direct bij het eLearning portaal.
- En el portal de eLearning de fischertechnik te ofrecemos la posibilidad de obtener aún más conocimientos de fondo sobre el tema del kit de construcción y de descargar amplios materiales didácticos de acompañamiento para utilizar en el aula. A través de <https://www.fischertechnik.de/elearning-stem-smart-physics> podrá acceder directamente al portal de aprendizaje electrónico.
- Com o portal de eLearning da fischertechnik damos lhe a possibilidade de obter ainda mais conhecimentos aprofundados sobre os kits de construção. Em <https://www.fischertechnik.de/elearning-stem-smart-physics> pode aceder diretamente ao portal de eLearning.
- Con il portale eLearning di fischertechnik vi diamo la possibilità di accumulare maggiori informazioni di base sul tema delle scatole di montaggio. Tramite <https://www.fischertechnik.de/elearning-stem-smart-physics> potete raggiungere direttamente il portale eLearning.
- Обучающий Интернет-портал компании fischertechnik предлагает вам возможность получить больше базовых знаний по теме конструирования. По ссылке <https://www.fischertechnik.de/elearning-stem-smart-physics> вы попадаете прямо на обучающий Интернет-портал.
- 通过 fischertechnik eLearning 电子学习门户网站，我们为您提供更多关于积木的背景知识。登陆 <https://www.fischertechnik.de/elearning-stem-smart-physics> 访问我们的 elearning 门户网站。

<https://www.fischertechnik.de/elearning-stem-smart-physics>



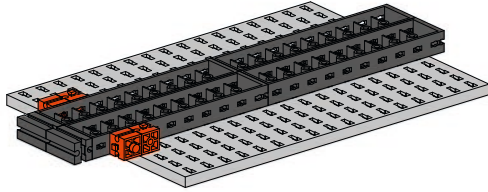
Inhalt
Contents
Contenu

Inhoud
Contenido
Conteúdo

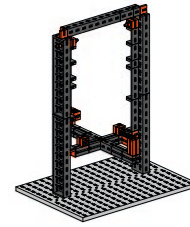
Contenuto
Содержание
目录

Einzelteilübersicht / Spare parts list / Liste des pièces détachées / Onderdelenoverzicht / Lista de piezas / Lista de Componentes /
Singoli componenti / Перечень деталей / 零件概览 2

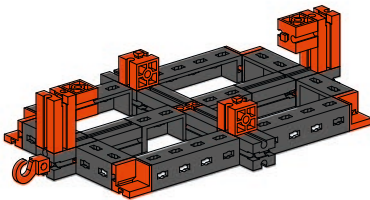
Montagetipps / Tips for assembly / Conseils d'assemblage / Montagetips / Consejos para el montaje / "Dicas" para montagem /
Consigli per il montaggio / Советы по сборке / 装配建议 4



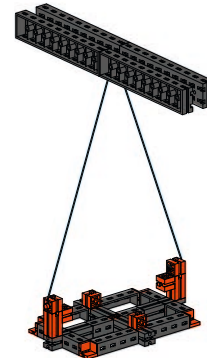
Klappe / Flap / Clapet / Klep / Solapa / Aba / Aletta / Хлопушка /
襟翼 4



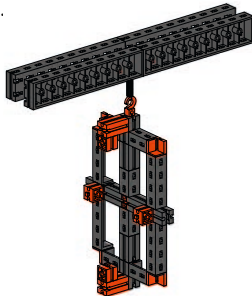
Pendel / Pendulum / Pendule / Pendel / Péndulo / Pêndulo / Pendolo /
Маятник / 钟摆 6



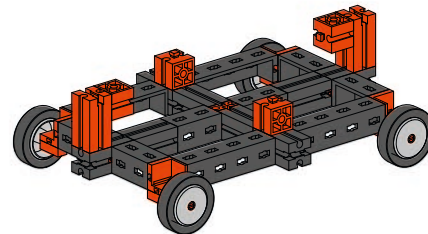
Smartphonehalterung / Smartphone holder / Support pour smartphone /
Smartphonehouder / Soporte para smartphone / Soporte para smartphone /
Supporto per smartphone / Подставка для смартфона /
智能手机支架 11



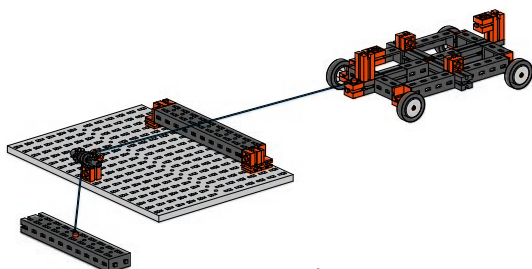
Fadenpendel / Thread pendulum / Pendule à fil / Draadpendel /
Péndulo de rosca / Pêndulo de rosca / Pendolo a filo /
Маятник на гибком подвесе / 线摆 13



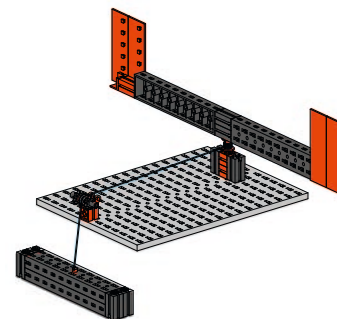
Federpendel / Spring pendulum / Pendule à ressort / Veerpendel / Péndulo de
muelle / Pêndulo de mola / Pendolo a molla / Маятник на пружине /
弹簧钟摆 15



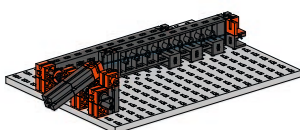
Wagen / Car / Voiture / Trolley / Coche / Carro / Auto / Тележка /
汽车 17



Wagen mit Umlenkung / Carriage with deflection / Chariot avec renvoi / Trolley met
doorbuiging / Carro con desviación / Carrinho com deflexão / Carrello trainato /
тема связанных тел / 带偏转的手推车 18



Drehausleger / Rotary feeder / Potence rotative / Roterende giek /
Plumín giratorio / Braço ou alimentador rotativo / Asta rotante / Вертушка /
旋转给料器 20



Saite / String / Corde / String / Cadena / Cordas / Fune / Музыкальный
инструмент / 字符串 24



Kugelexperiment / Sphere experiment / Expérience de la boule / Bol experiment
/ Experimento de la esfera / Experimento em esfera / Esperimento della sfera /
Эксперимент с шариком / 球体实验 28











Einzelteilübersicht
Spare parts list
Liste des pièces détachées







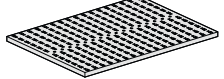

	31 016 1 x
	31 060 1 x
	31 330 2 x
	31 597 2 x
	31 690 2 x
	31 982 10 x
	32 064 9 x
	32 085 1 x
	32 854 4 x
	32 869 1 x

Onderdelenoverzicht
Lista de piezas
Lista de Componentes

	32 879 8 x
	34 995 4 x
	35 063 1 x
	35 088 1 x
	35 945 2 x
	36 293 1 x
	36 586 4 x
	36 819 1 x
	36 920 7 x
	36 921 4 x

Singoli componenti
Перечень деталей
零件概览

	36 922 4 x
	37 468 5 x
	37 679 4 x
	38 225 1 x
	38 240 6 x
	38 251 4 x
	38 258 1 x
	38 415 2 x
	38 416 1 x
	108 278 1 x

	116 251 2 x
	130 593 1 x
	144 262 1 x
	146 535 4 x
	154 485 1 x
	185 695 1 x
	200 921 1 x
	203 653 1 x

Sicherheitshinweise
Safety Information
Consignes de sécurité

Veiligheidsrichtlijnen
Indicaciones de seguridad
Observações sobre segurança

Informazioni per la sicurezza
Указания по технике безопасности
安全指南



- Achtung: Erstickungsgefahr durch kleine Kugel und verschluckbare Kleinteile!
- Warning: risk of suffocation due to small balls and parts that can be swallowed!
- Attention : risque d'étouffement avec des petites billes et des petites pièces pouvant être avalées !
- Waarschuwing: verstikkingsgevaar door kleine kogeltjes en inslikbare kleine delen!

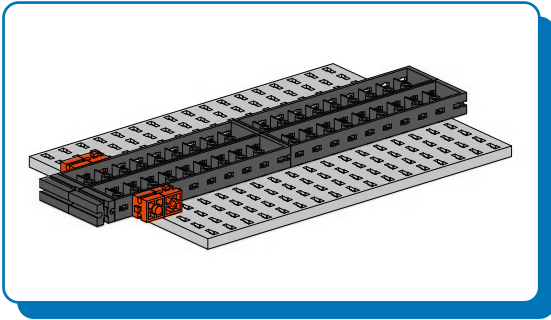
- Advertencia: riesgo de asfixia con las bolas y piezas pequeñas que pueden ingerirse!
- Advertência: perigo de asfixia devido a esferas pequenas e peças pequenas que podem ser engolidas!
- Avviso: pericolo di soffocamento a causa delle piccole sfere e dei piccoli pezzi ingoiabili!
- Внимание: Опасность удушения маленьким шариком и маленькими деталями!
- 警告：可能误吞的小球和小零件有造成窒息的危險！

- Alle Einzelteile, insbesondere bewegliche Teile sind falls notwendig zu warten und zu reinigen.
- All components, especially moving parts, should be maintained and cleaned as necessary.
- Toutes les pièces détachées et en particulier les pièces mobiles, sont, si nécessaire, à entretenir et à nettoyer.
- Alle onderdelen, vooral de bewegende delen, kunnen, indien noodzakelijk, onderhouden en gereinigd worden.
- Es necesario mantener limpio y en buen estado cada una de las piezas. Particularmente las piezas móviles.

- Todas as peças individuais, especialmente peças móveis, devem ser submetidas à manutenção e limpas se necessário.
- Se necessario, tutti i singoli componenti, soprattutto le parti mobili, si devono eventualmente sottoporre a manutenzione e pulizia.
- Все детали, особенно подвижные, требуют ухода и чистки.
- 必要时应保养和清洁所有零件，尤指运动部件。

- Achtung! Verletzungsgefahr an Bauteilen mit funktionsbedingten scharfen Kanten und Spitzen!
- Caution! Be careful not to hurt yourself on components with sharp or pointed edges!
- Attention! Risque de blessure sur les éléments comportant des arêtes et o pointes vives indispensables au bon fonctionnement!
- Let op! U kunt zich bezeren aan bouwstenen met scherpe randen of punten!
- Atención! ¡Cuidado, no te hagas daño con los componentes con bordes afilados o puntiagudos!

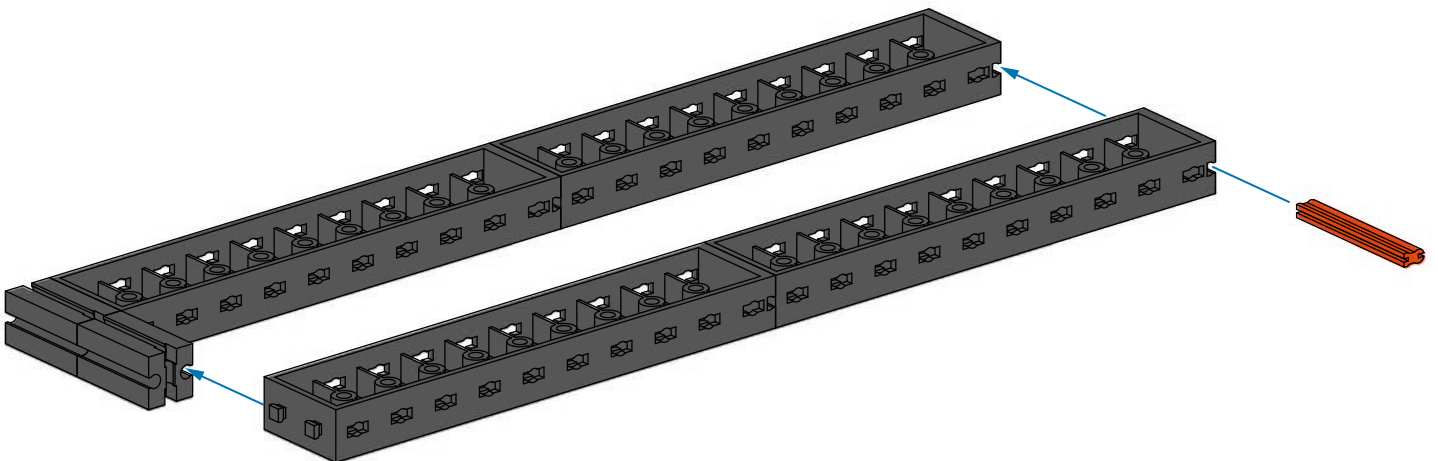
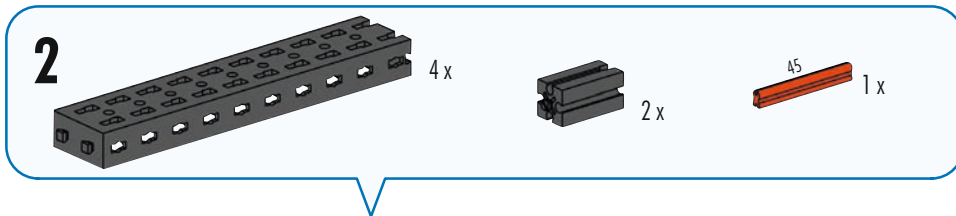
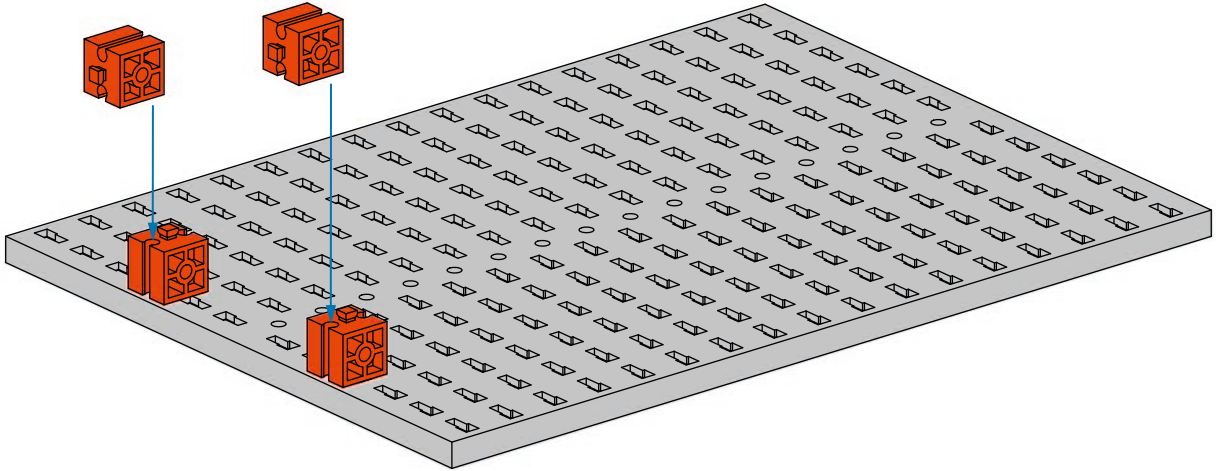
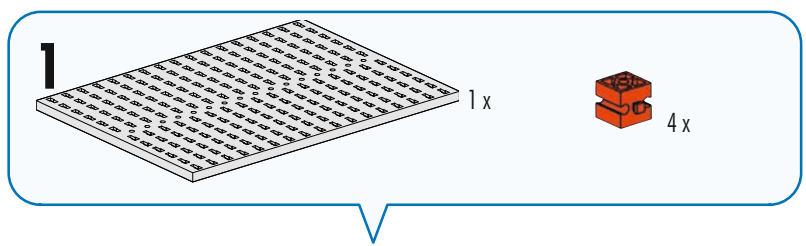
- Atenção! Perigo de ferimentos em peças componentes com cantos vivos e pontas obrigatórios para o funcionamento !
- Attenzione! Pericolo di lesioni dovute a componenti con spigoli vivi e punte per motivi funzionali!
- Будьте осторожны! Об острые края деталей и и наконечники можно порезаться!
- 注意！
因功能需要而带有锋利的棱边和尖角的部件可能会带来受伤危险！



Klappe
Flap
Clapet

Klep
Solapa
Aba

Aletta
Хлопушка
襟翼

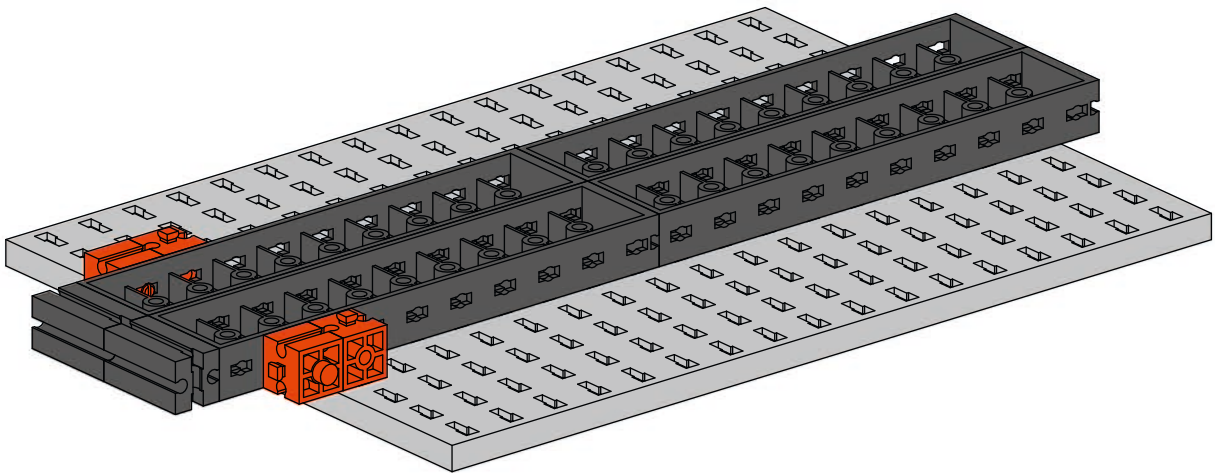
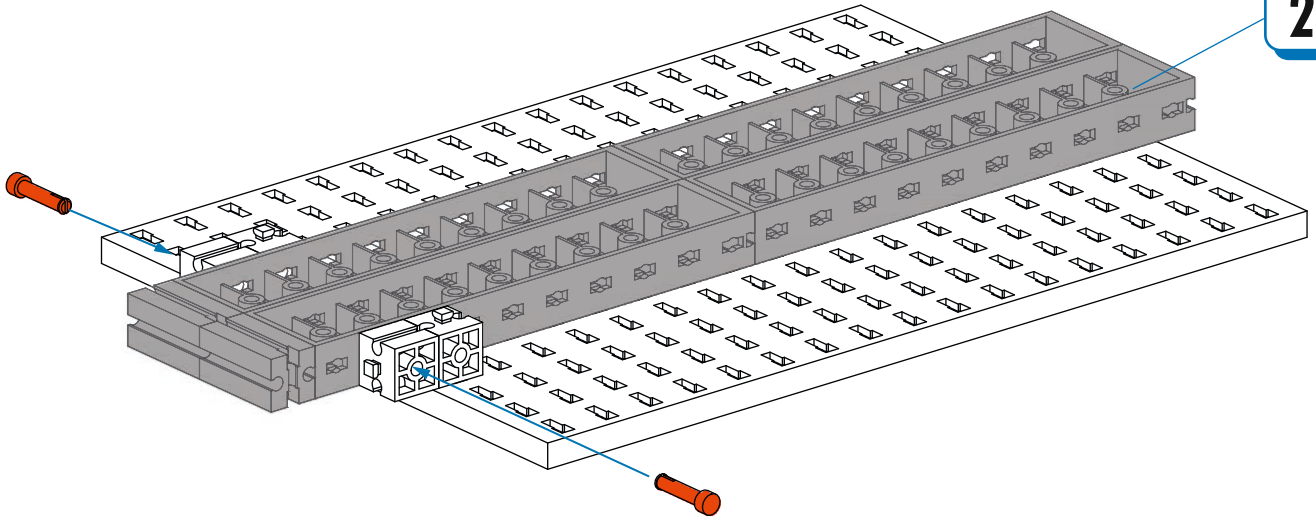


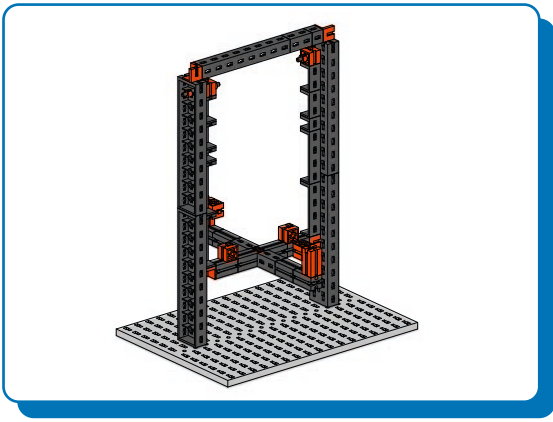
3

2x



2

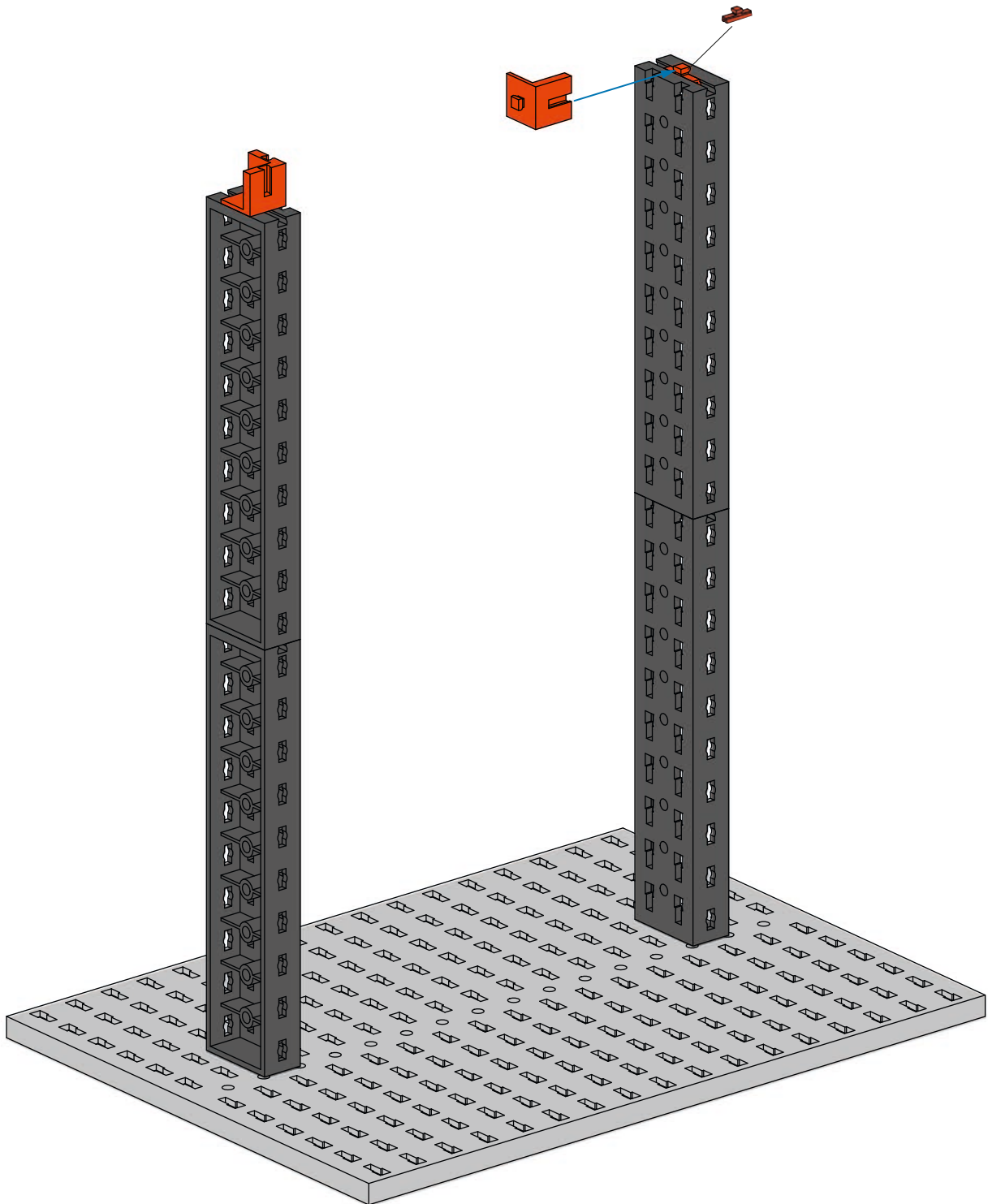
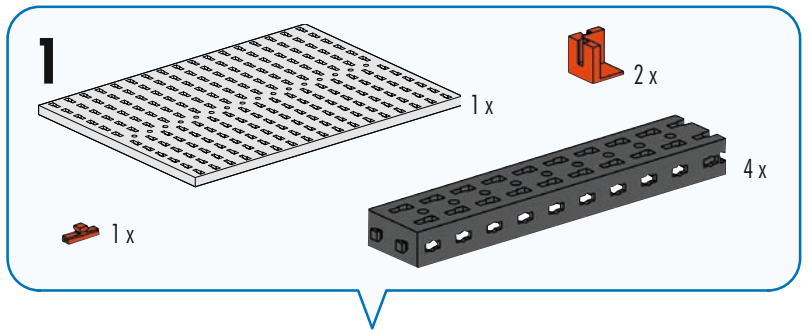








Pendel
Pendulum
Pendule

Pendel
Péndulo
Pêndulo

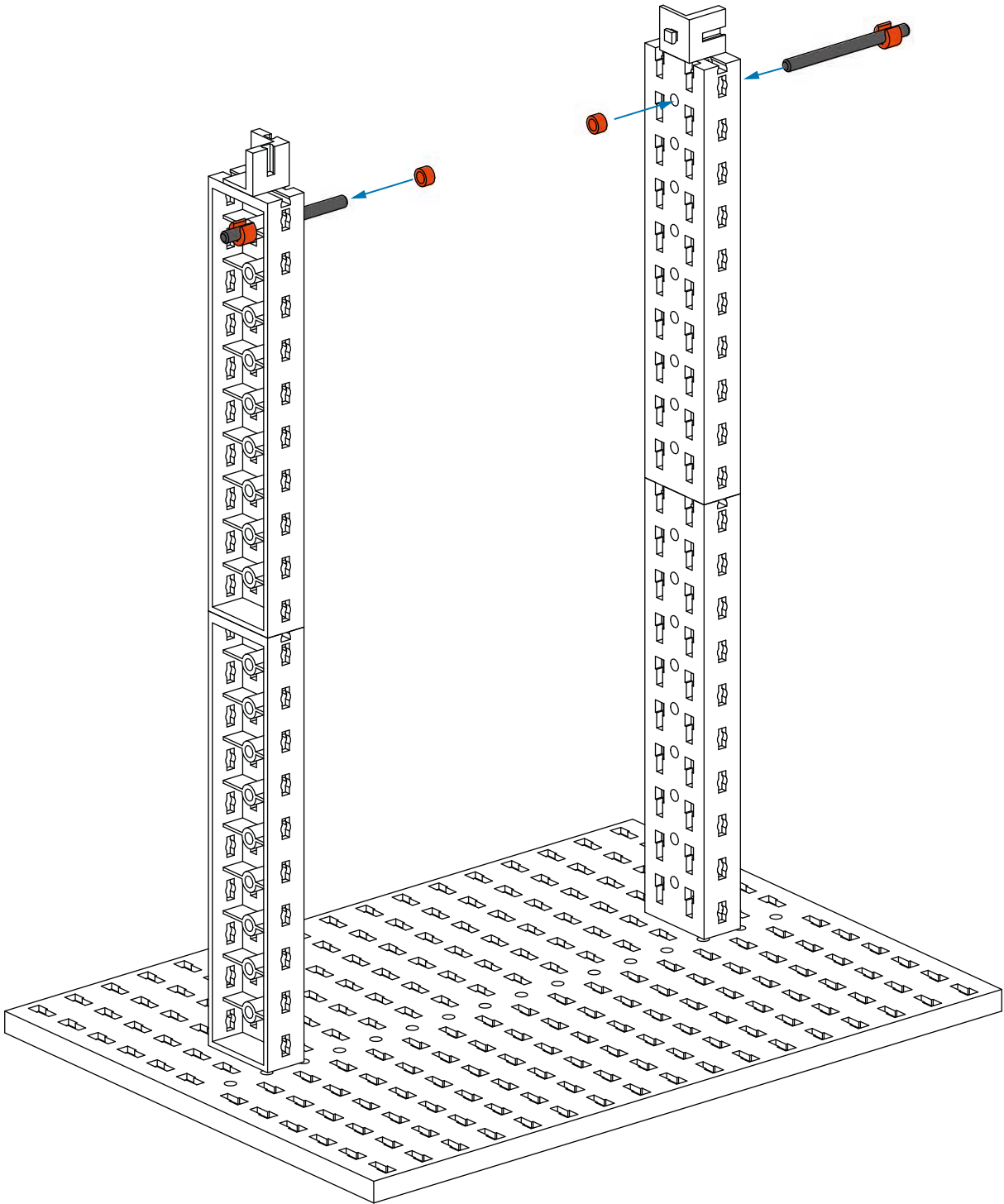
Pendolo
Маятник
钟摆

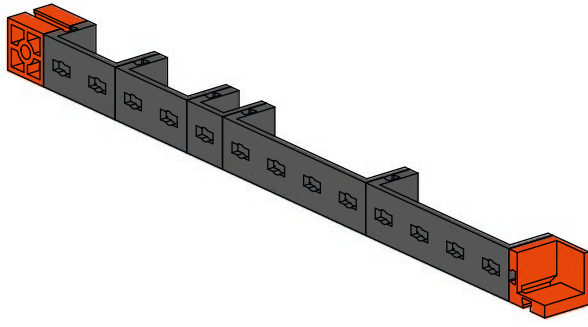


2  2 x  2 x

 2 x  2 x

50 mm



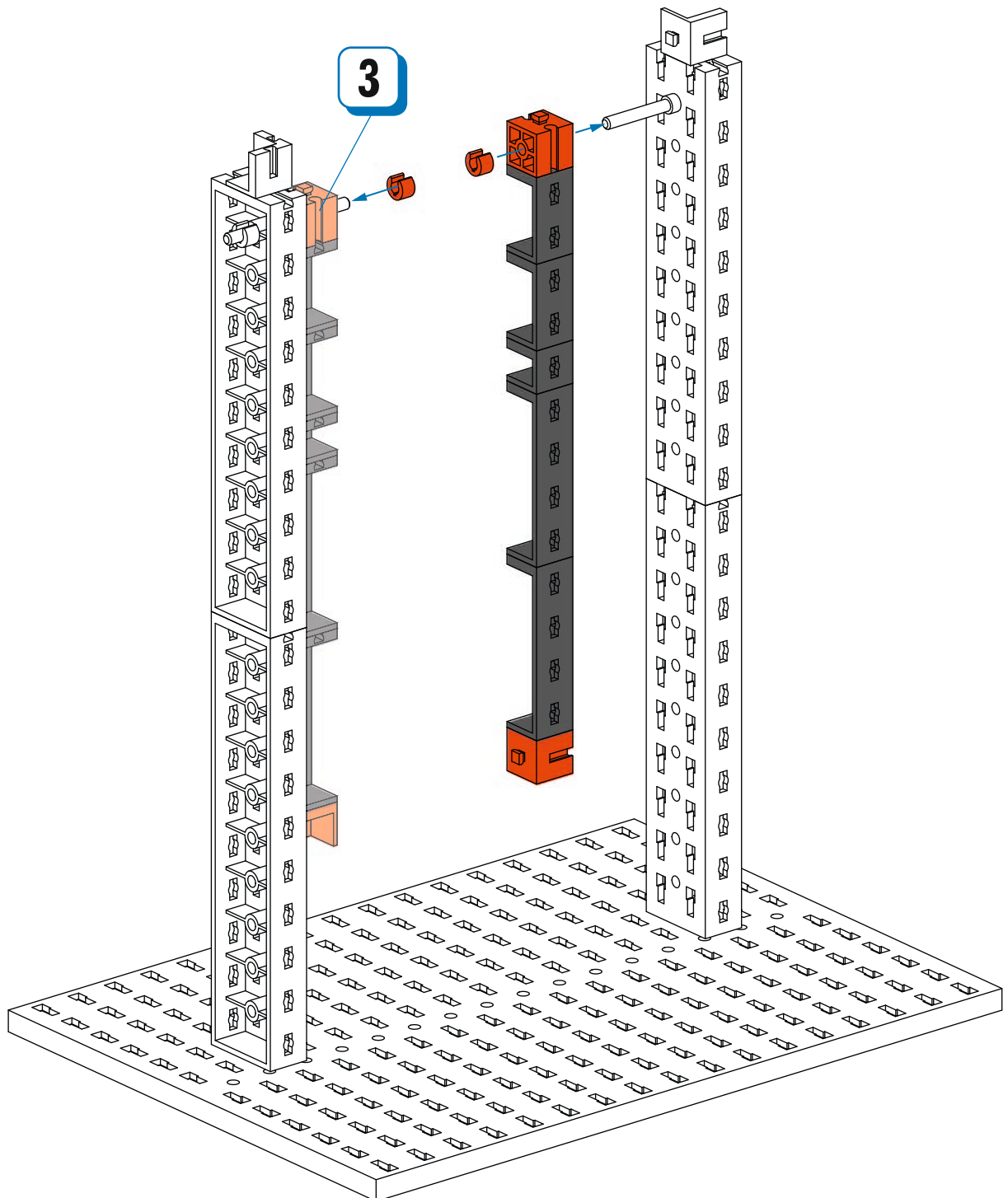


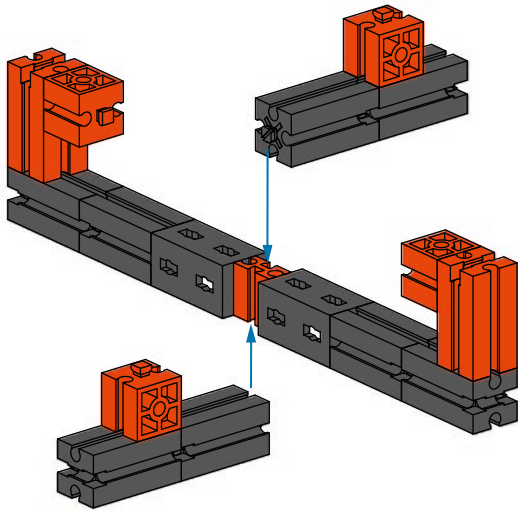
3

- 1x Orange Technic 1x2 Connector
- 1x Orange Technic L-Shape
- 1x Grey Technic Pin
- 2x Grey Technic 1x2 Connector
- 2x Grey Technic 1x3 Connector

4

- 2x Grey Technic 1x3 Connector
- 2x Grey Technic 1x2 Connector
- 1x Grey Technic Pin
- 1x Orange Technic 1x2 Connector
- 1x Orange Technic L-Shape
- 2x Orange Technic Pin



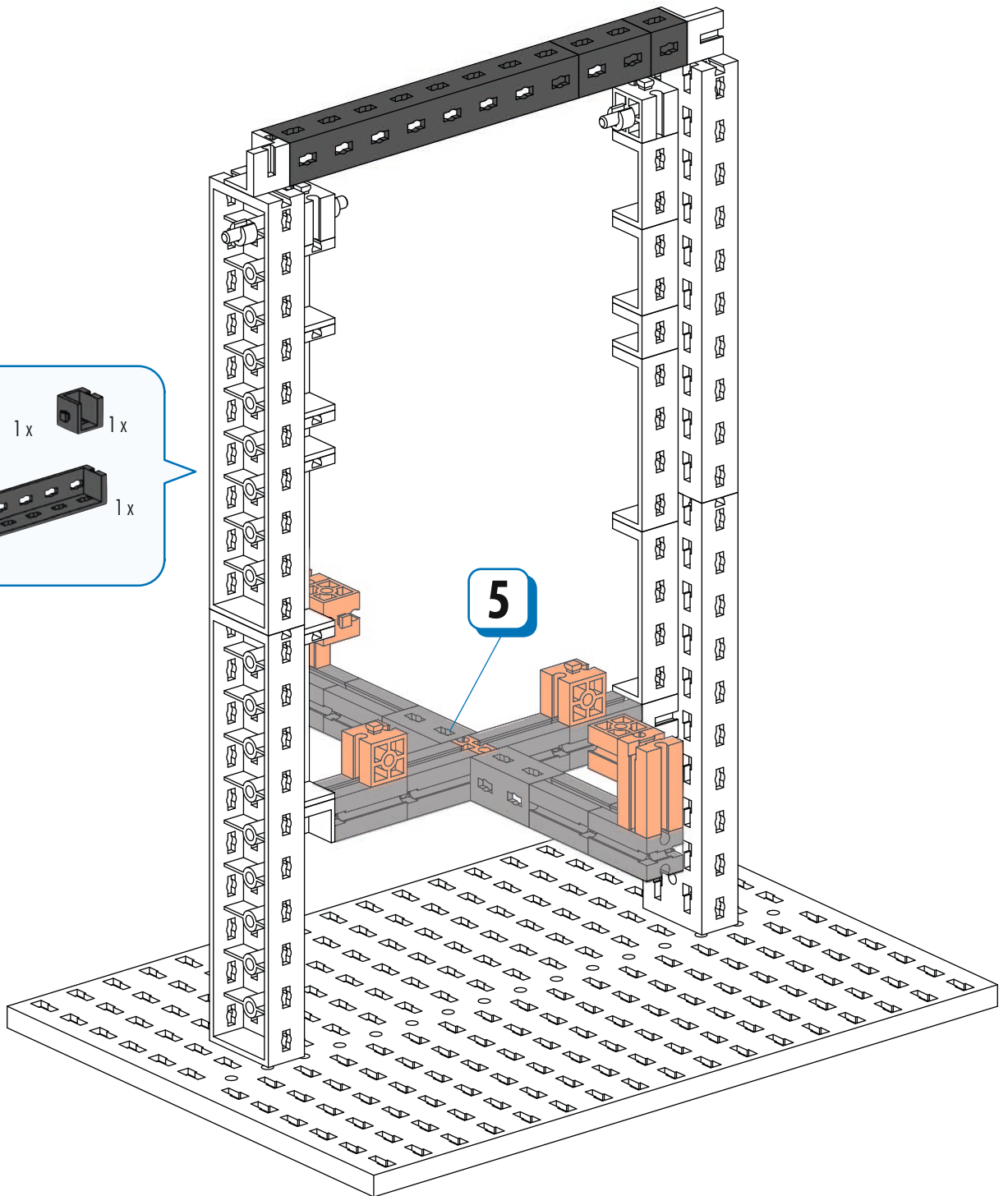


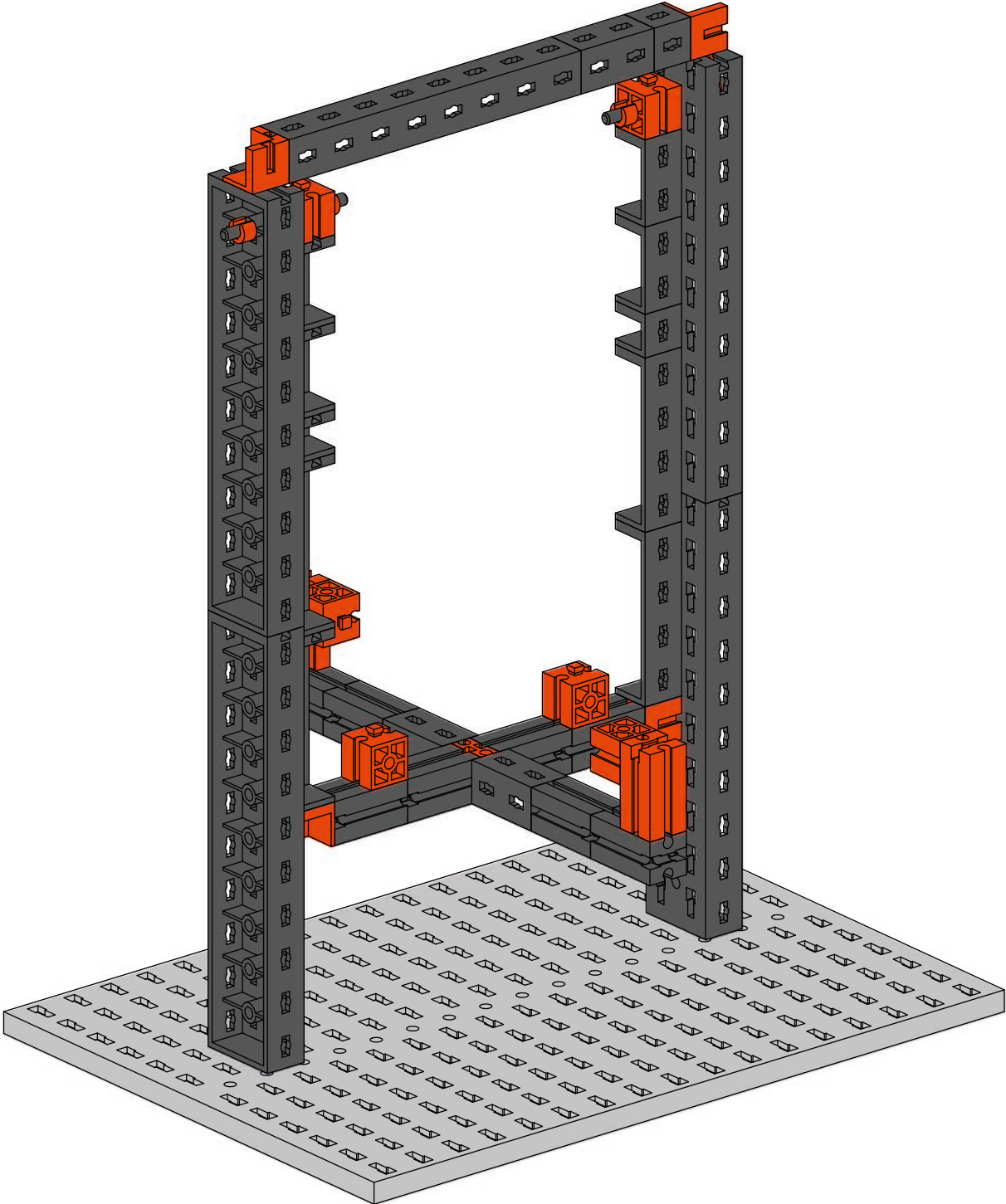
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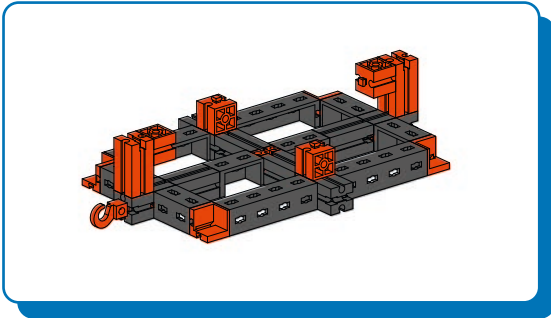
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- 2 x [Grey Technic Connector 1x2]
- 1 x [Orange Technic Connector 1x2]
- 2 x [Orange Technic Connector 1x2]
- 4 x [Orange Technic Connector 1x2]

6

- 1 x [Grey Technic Connector 1x2]
- 1 x [Grey Technic Connector 1x2]
- 1 x [Grey Technic Beam 1x12]



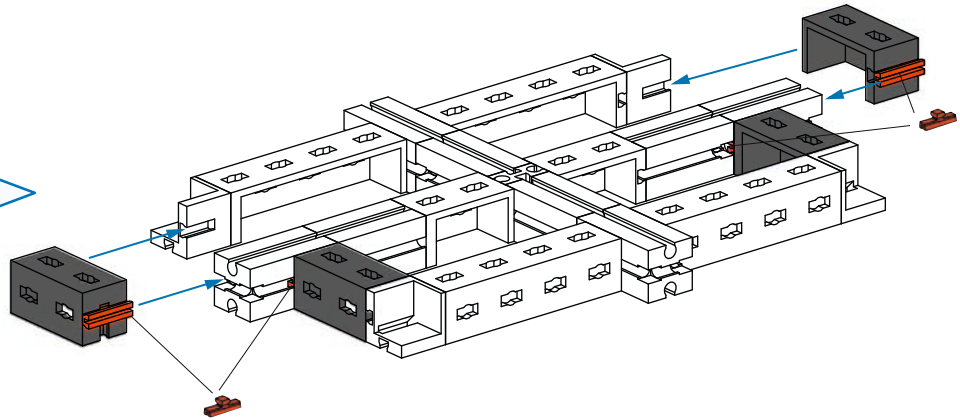
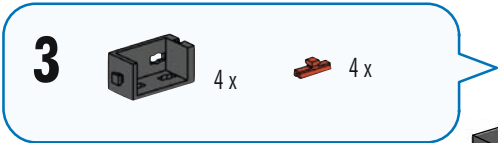
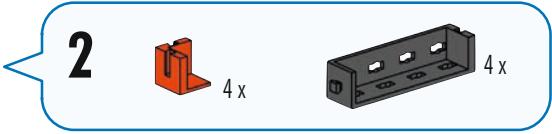
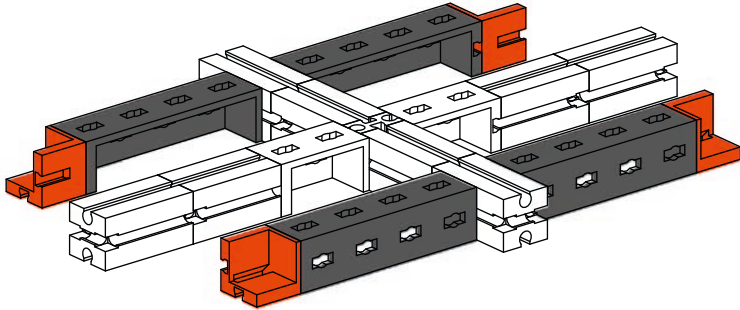
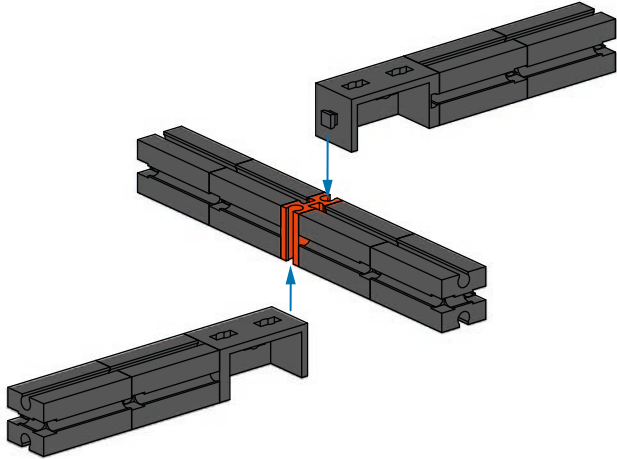
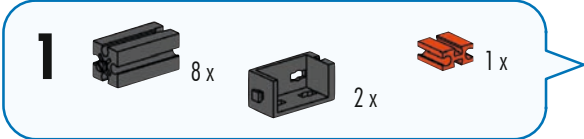




Smartphonehalterung
Smartphone holder
Support pour smartphone

Smartphonehouder
Soporte para smartphone
Suporte para smartphone

Supporto per smartphone
Подставка для смартфона
智能手机支架



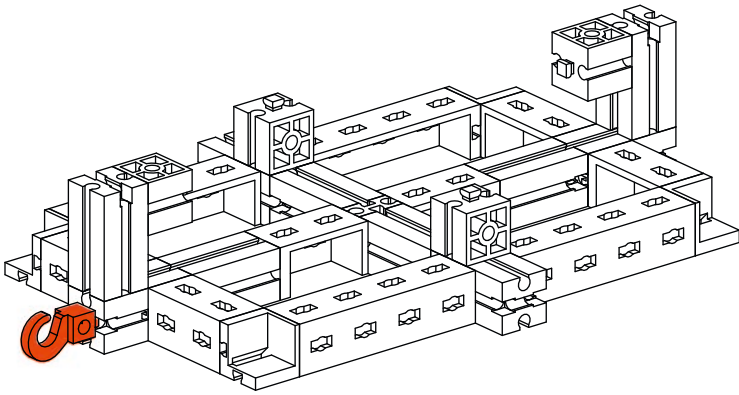
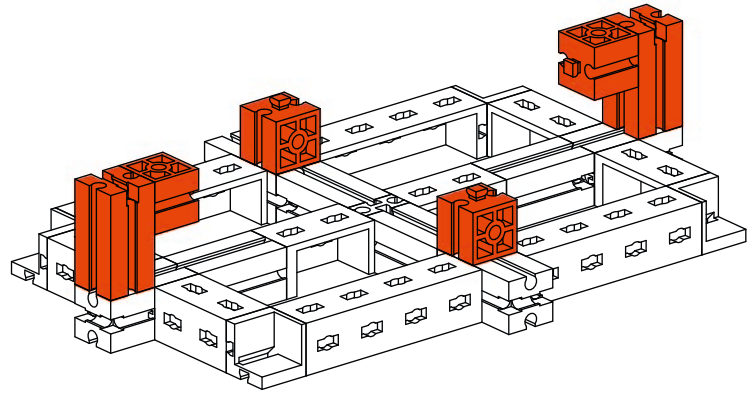
4



2x



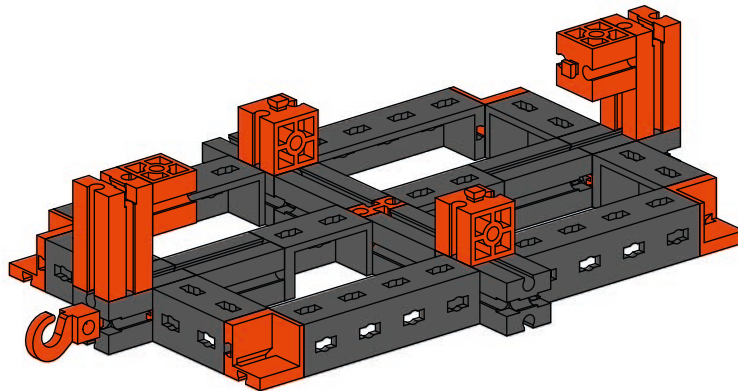
4x



5



1x



Fadenpendel
Thread pendulum
Pendule à fil

Draadpendel
Péndulo de rosca
Pêndulo de rosca

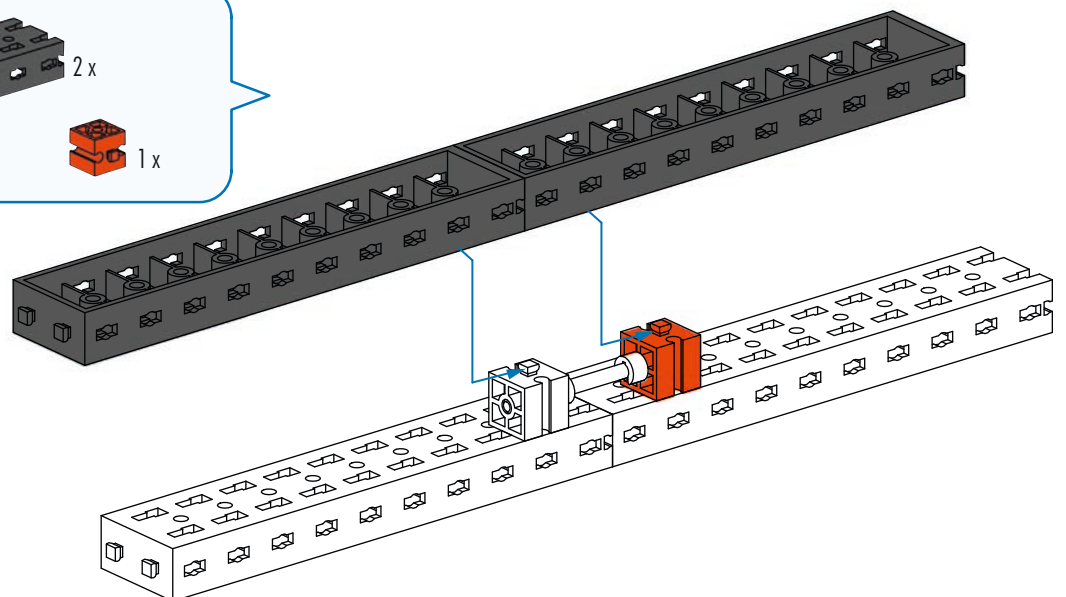
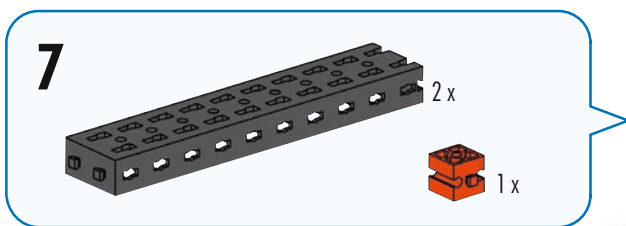
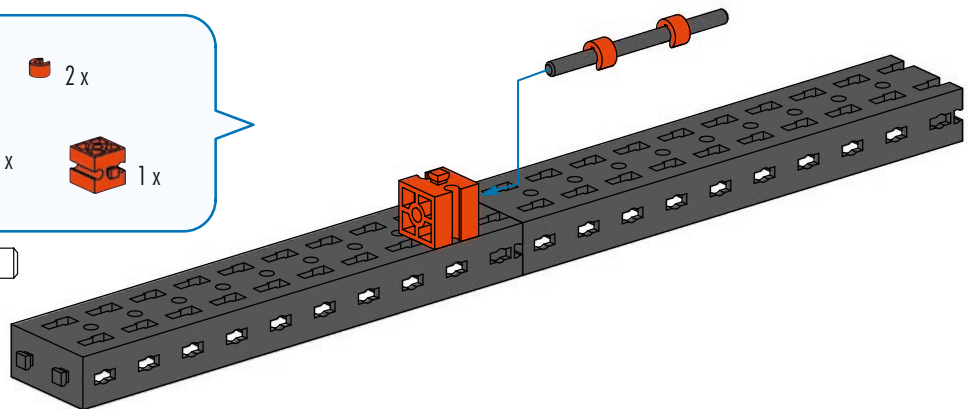
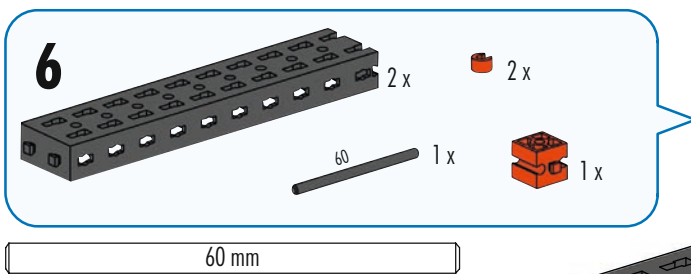
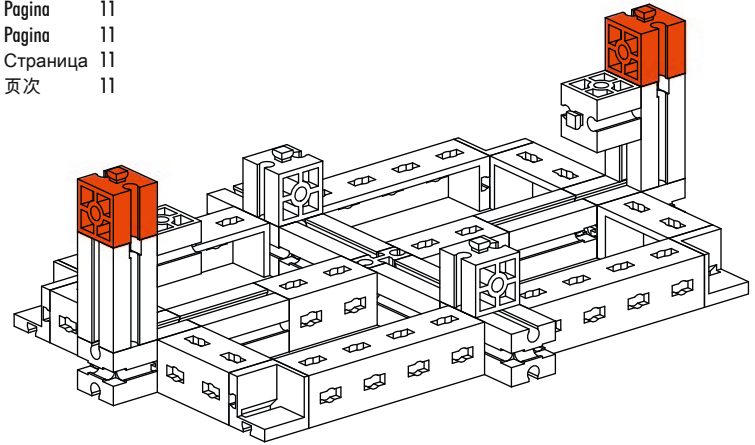
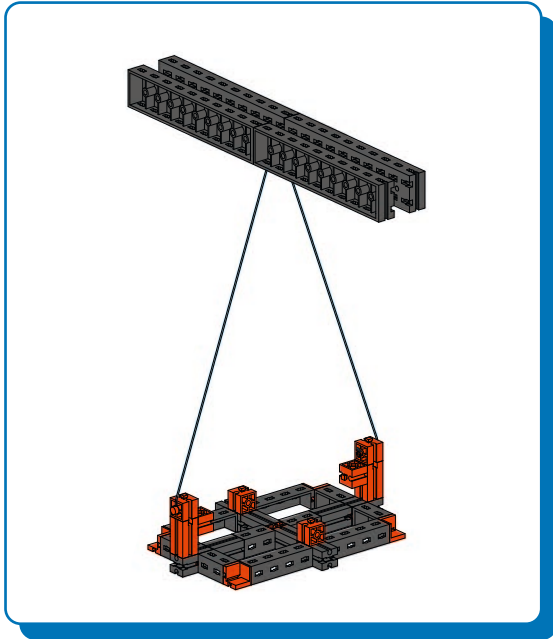
Pendolo a filo
Маятник на гибком
подвесе
线摆

1-4

Seite 11
Page 11
Page 11
Bladzijde 11
Página 11
Pagina 11
Pagina 11
Страница 11
页次 11

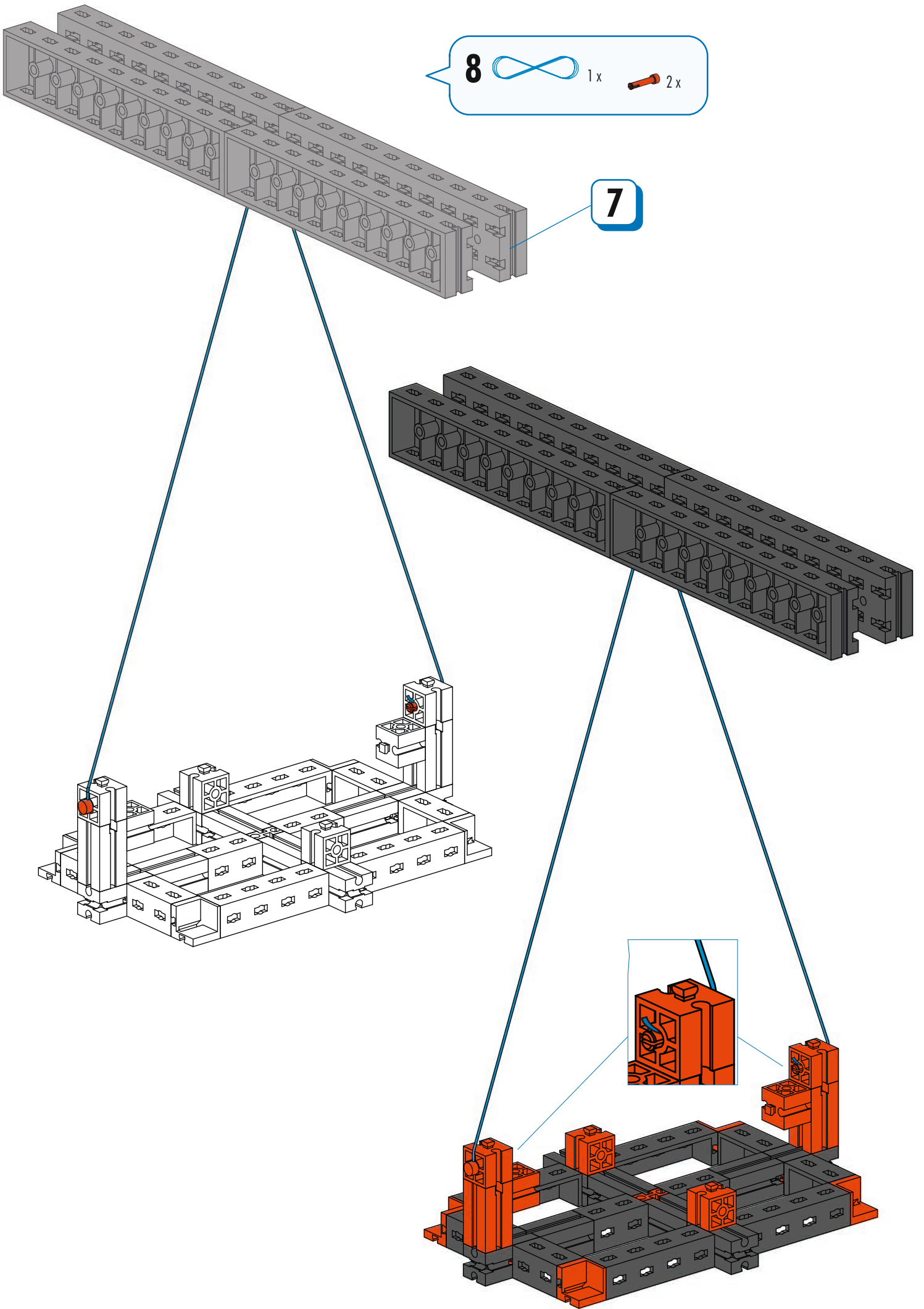
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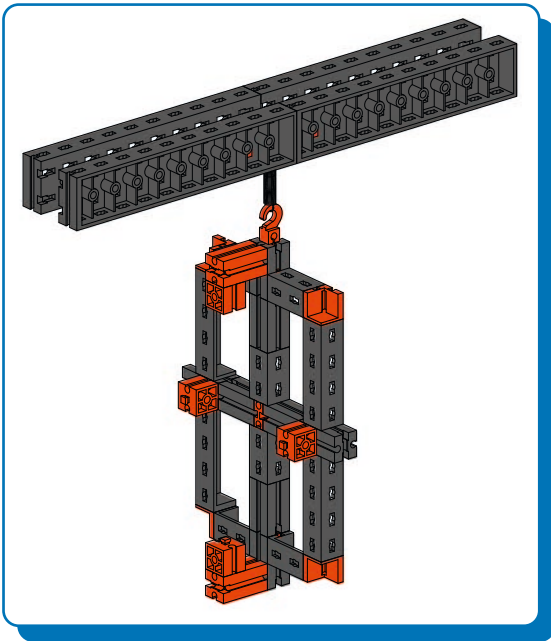
2 x



8  1x  2x

7





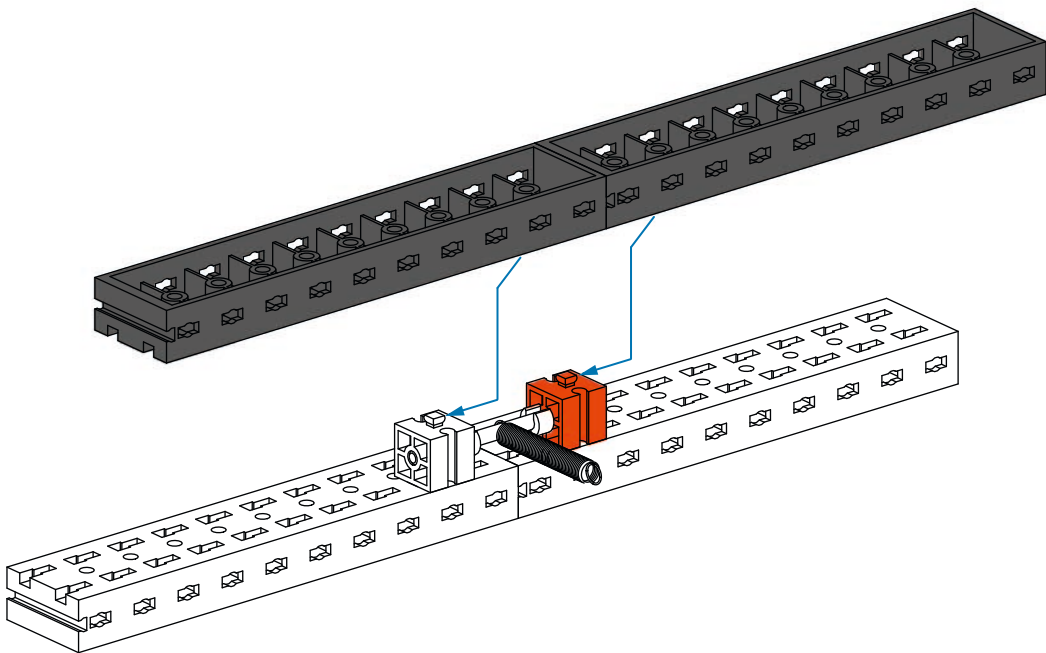
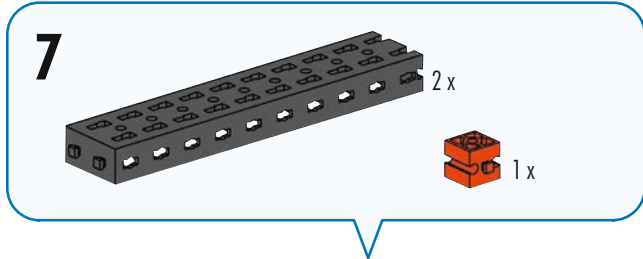
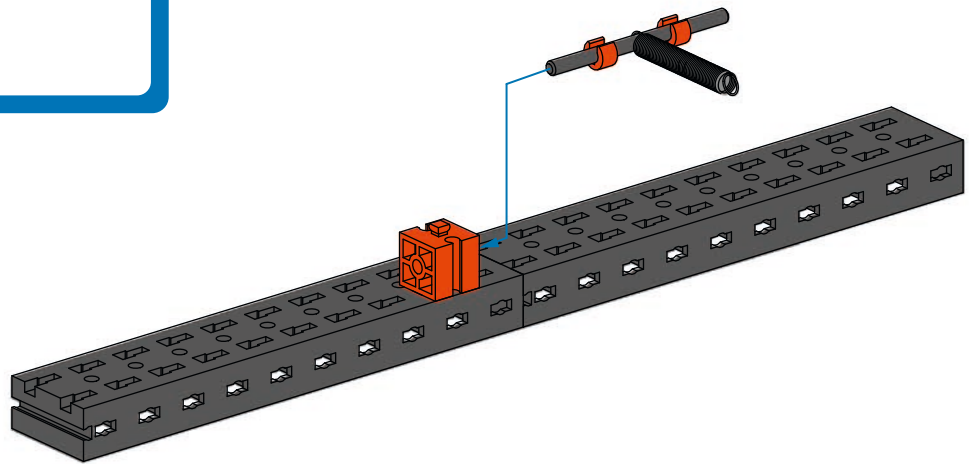
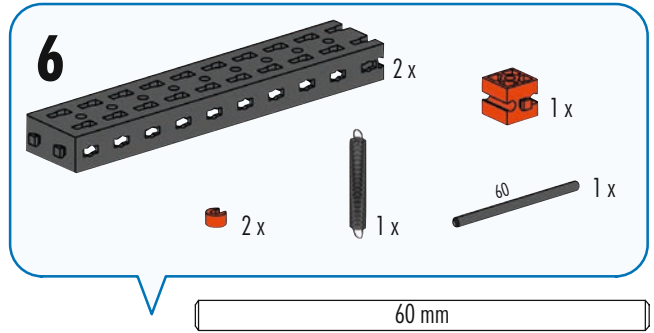
Federpendel
Spring pendulum
Pendule à ressort

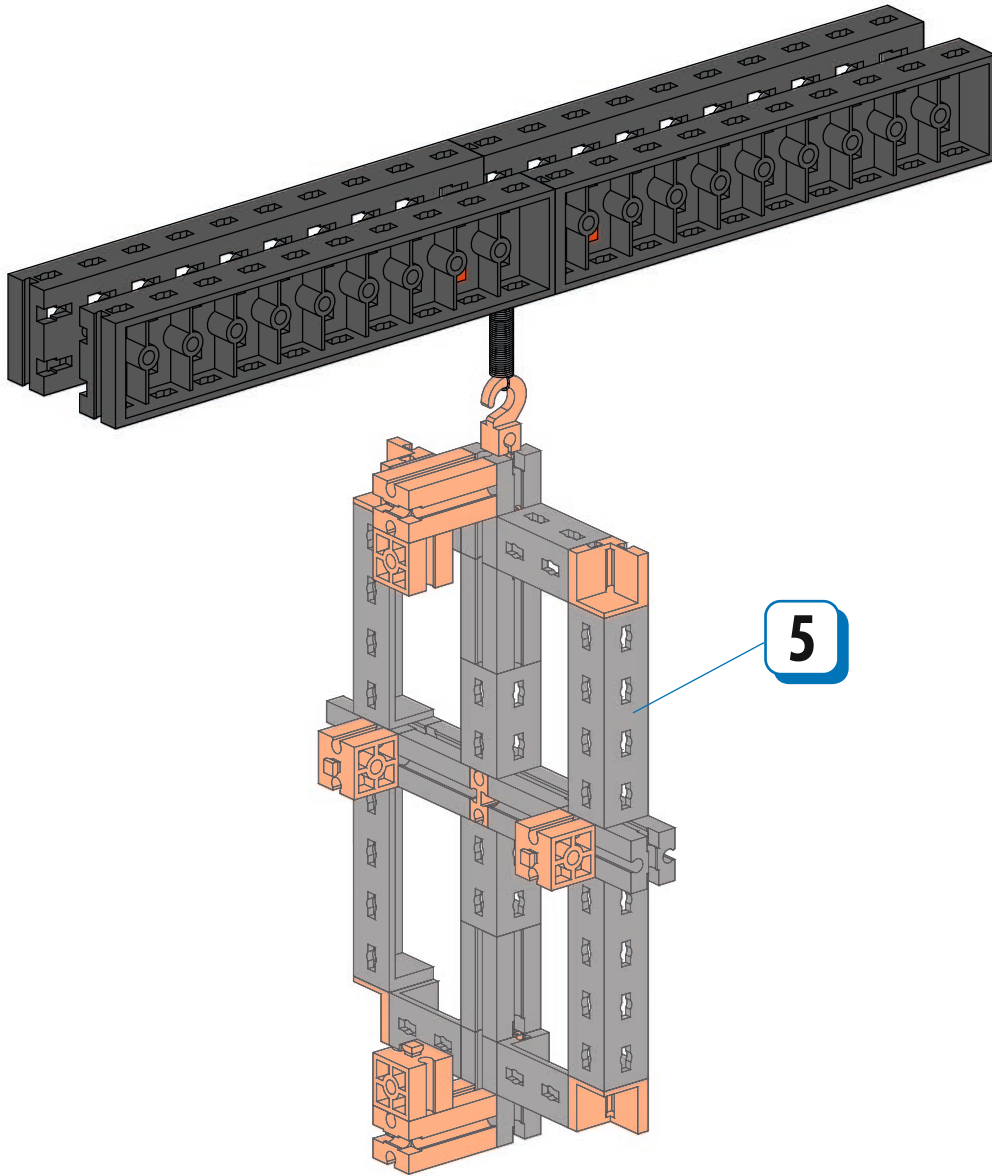
Veerpendel
Péndulo de muelle
Pêndulo de mola

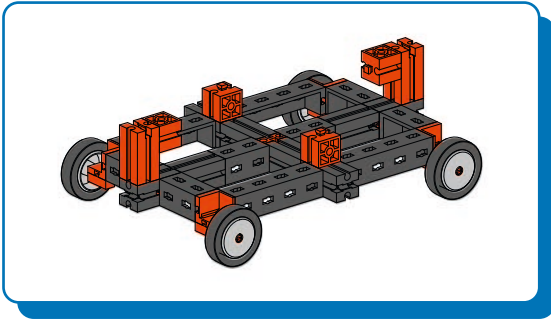
Pendolo a molla
Маятник на пружине
弹簧钟摆

1-5

Seite 11
Page 11
Page 11
Bladzijde 11
Página 11
Pagina 11
Pagina 11
Страница 11
页次 11







Wagen
Car
Voiture

Auto
Coche
Carro

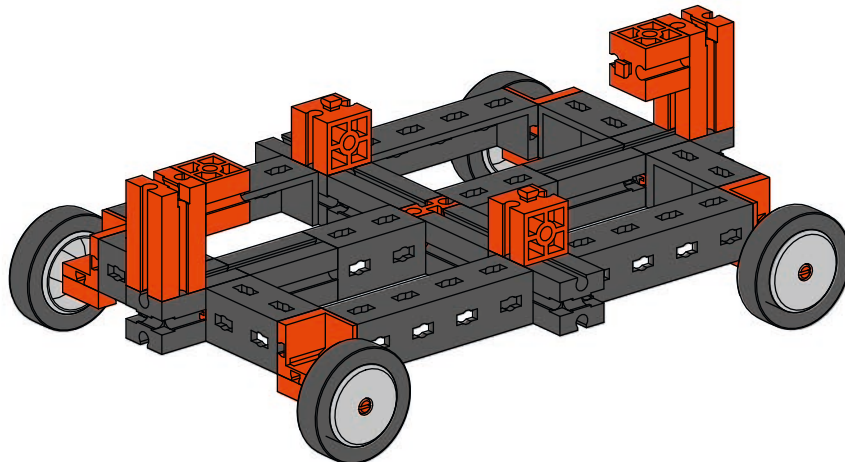
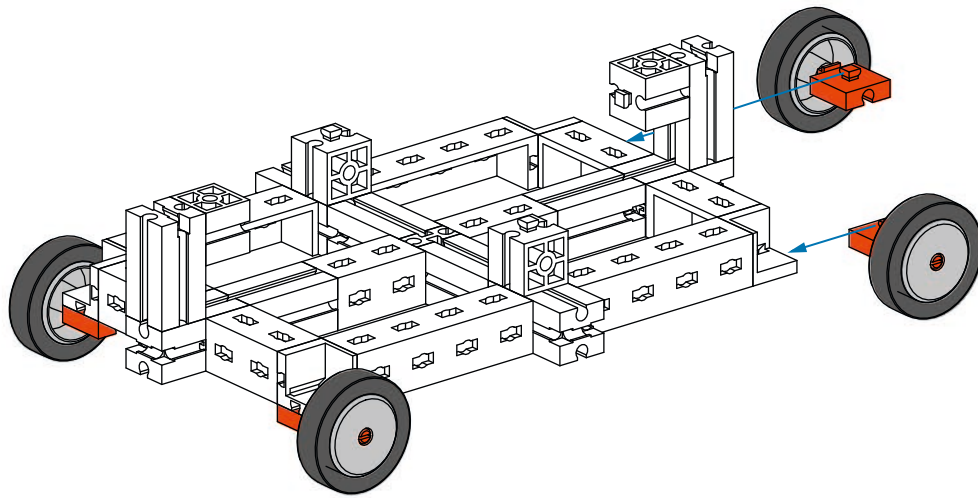
Auto
Тележка
汽车

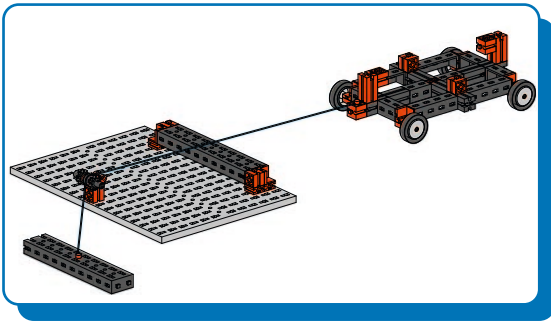
1-4

Seite 11
Page 11
Page 11
Bladzijde 11
Página 11
Página 11
Página 11
Страница 11
页次 11

5

4 x
4 x
4 x





Wagen mit Umlenkung
Carriage with deflection
Chariot avec renvoi

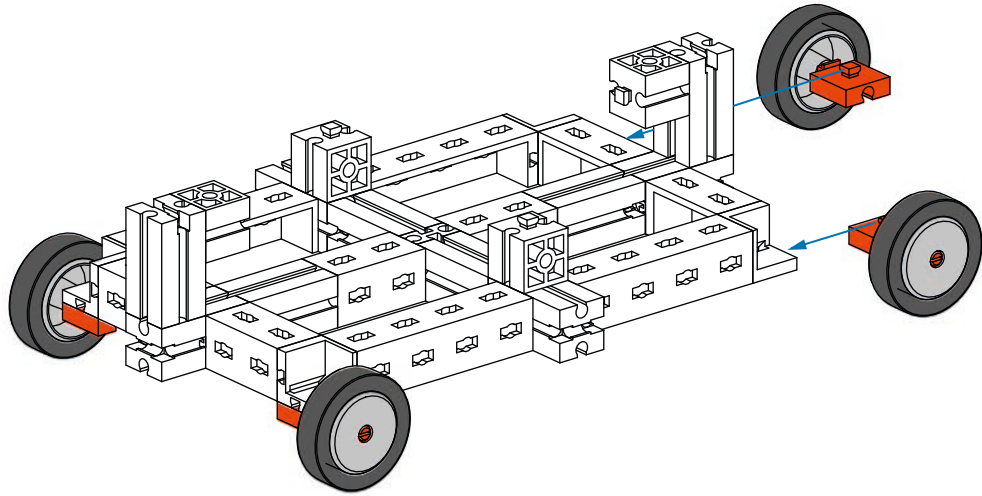
Trolley met doorbuiging
Carro con desviación
Carrinho com deflexão

Carrello trainato
тема связанных тел
帶偏转的手推车

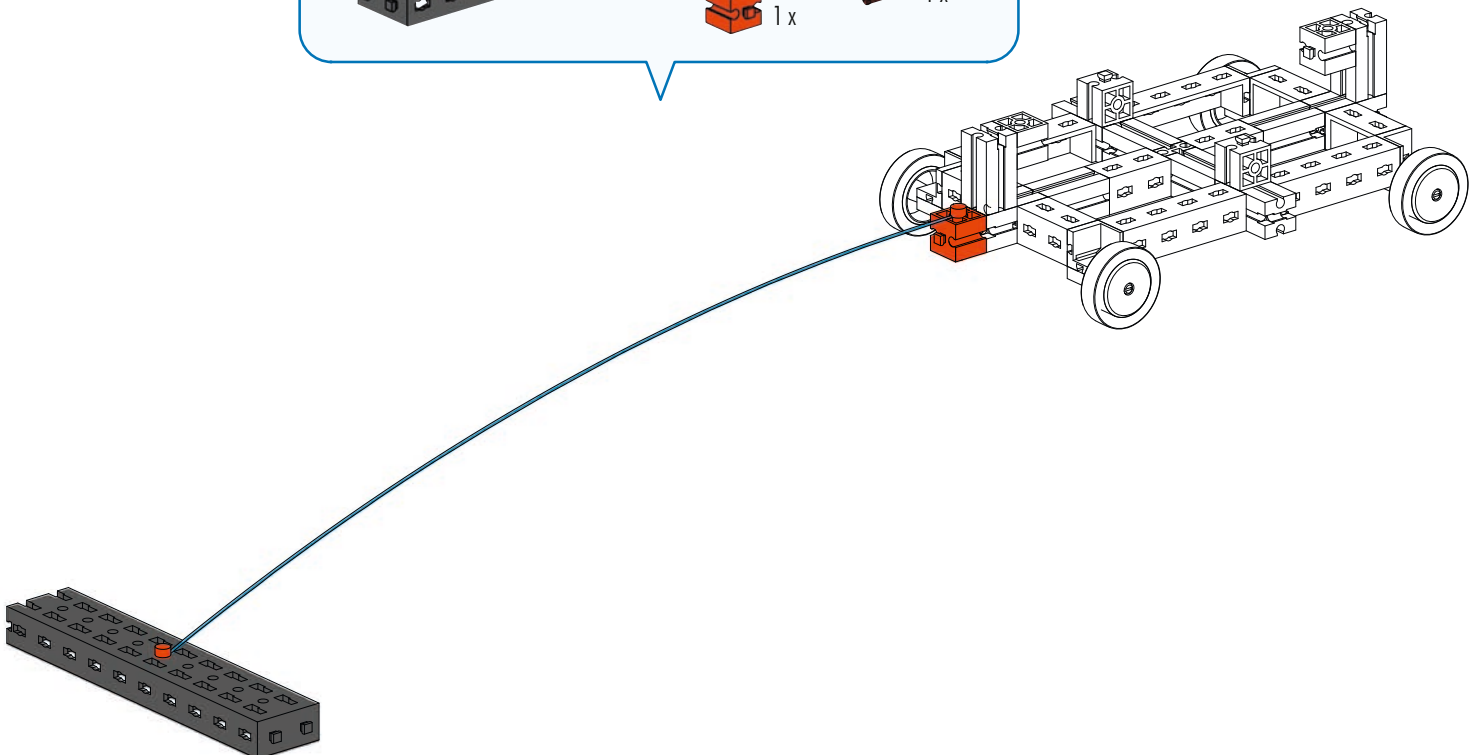
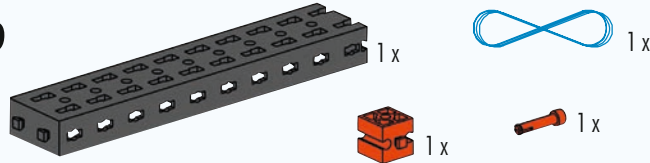
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Seite 11
Page 11
Page 11
Bladzijde 11
Página 11
Página 11
Página 11
Страница 11
页次 11

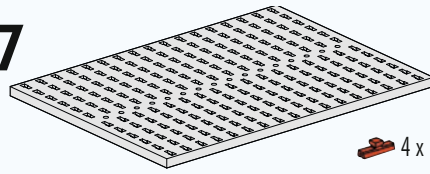
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6



7



1 x



3 x



2 x



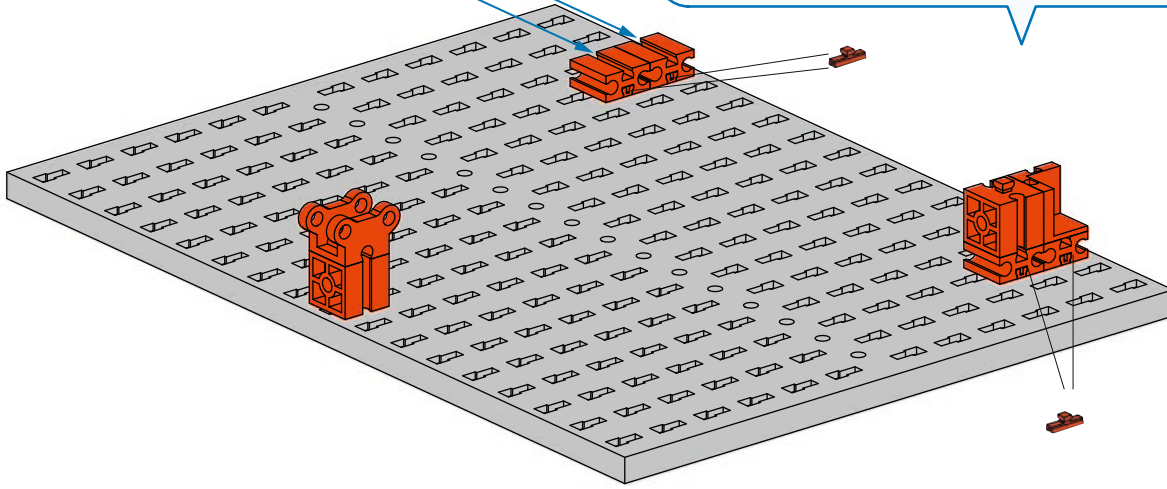
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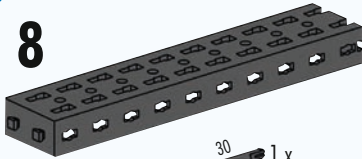
4 x



1 x



8



1 x



2 x



30

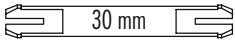
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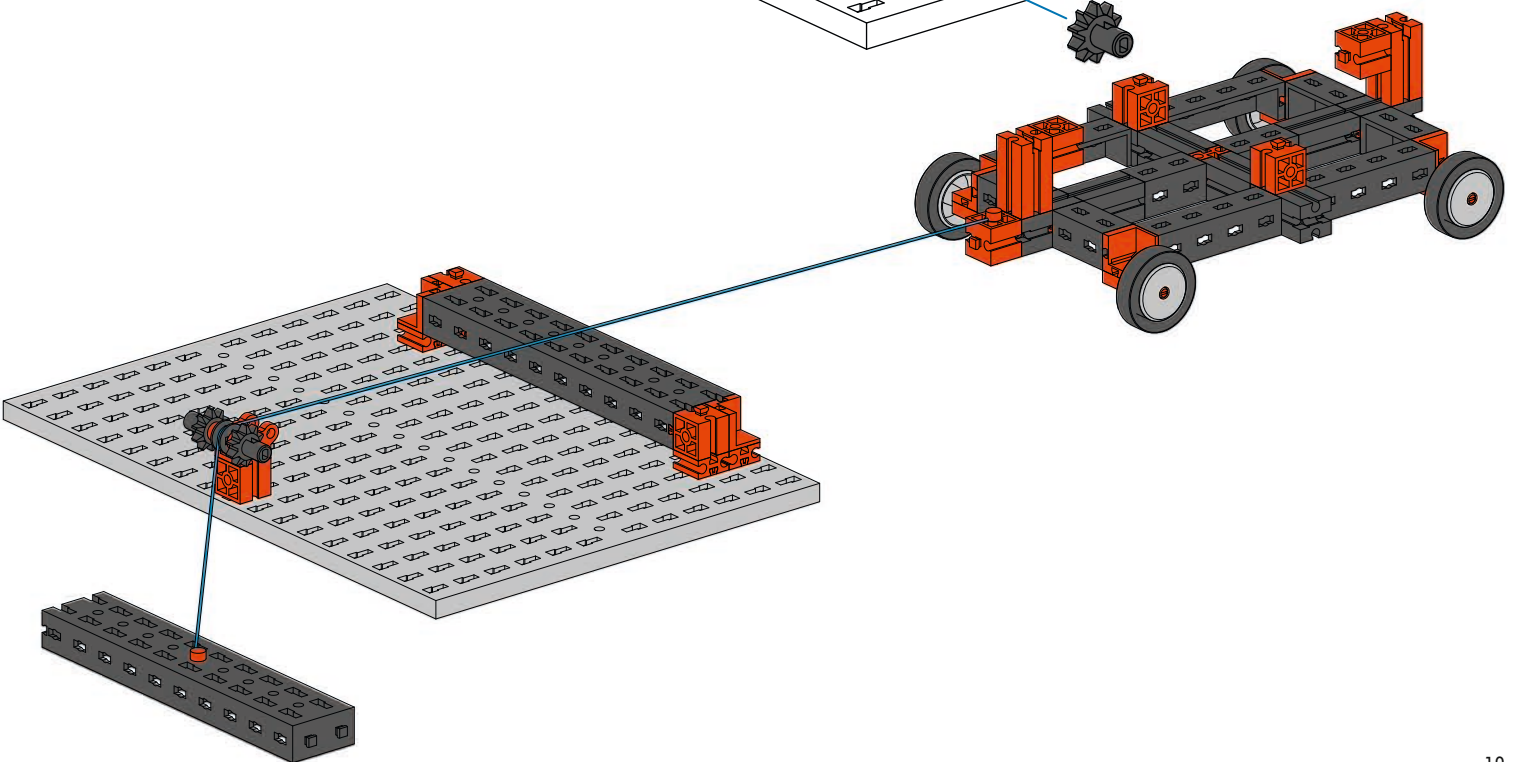
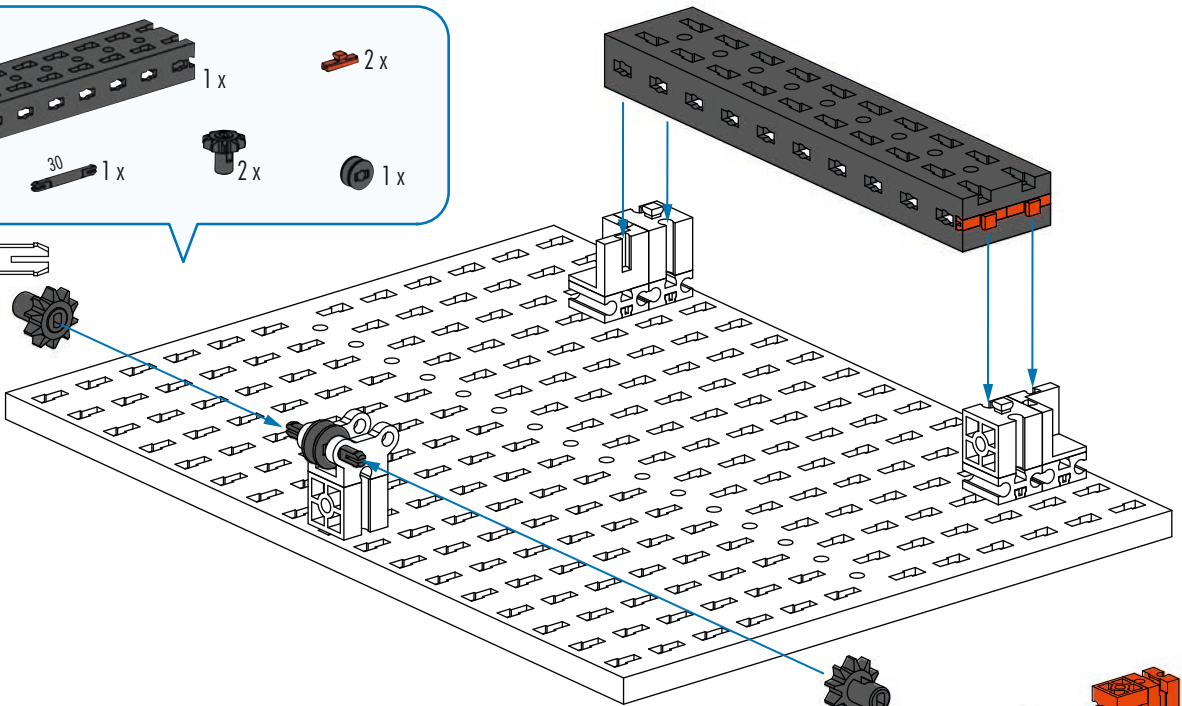
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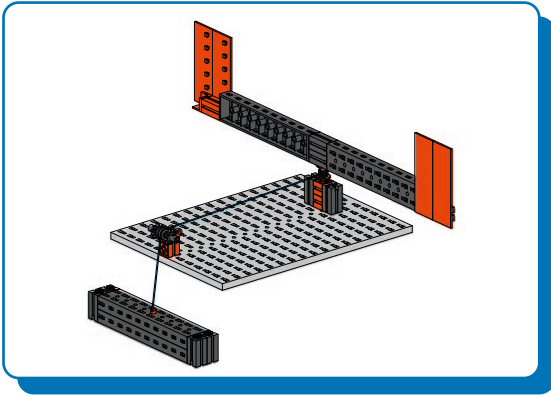


1 x



30 mm

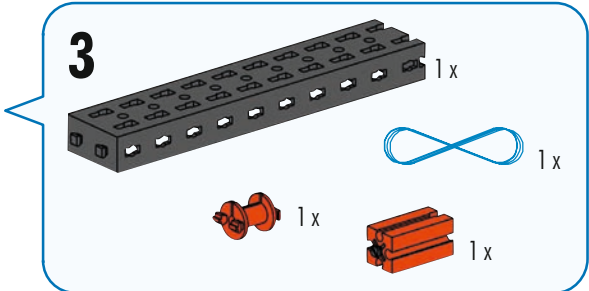
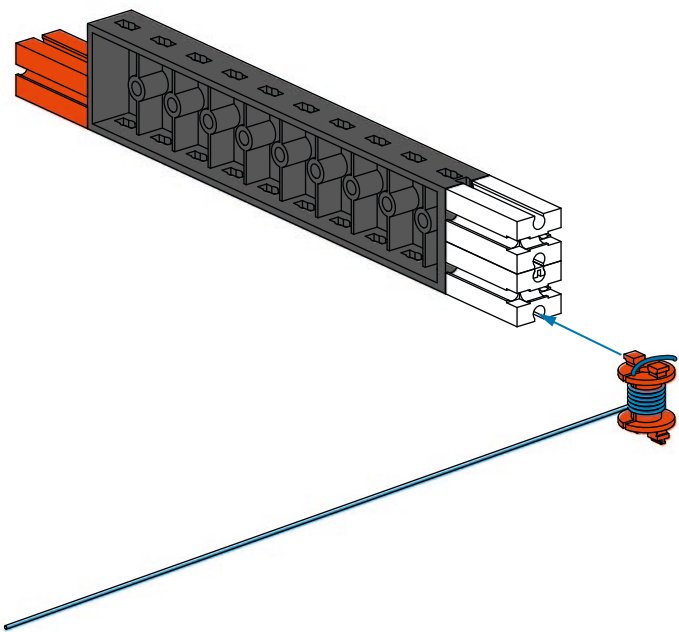
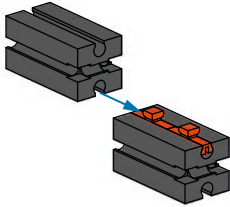
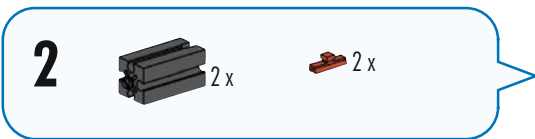
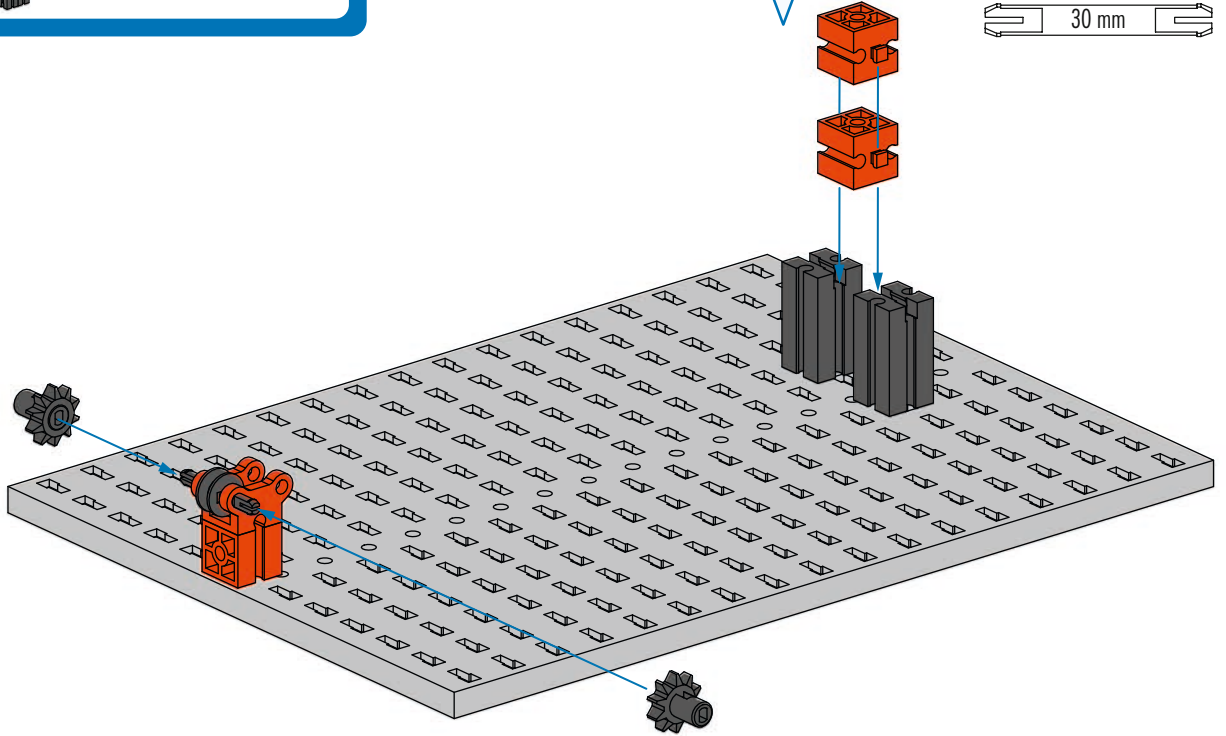
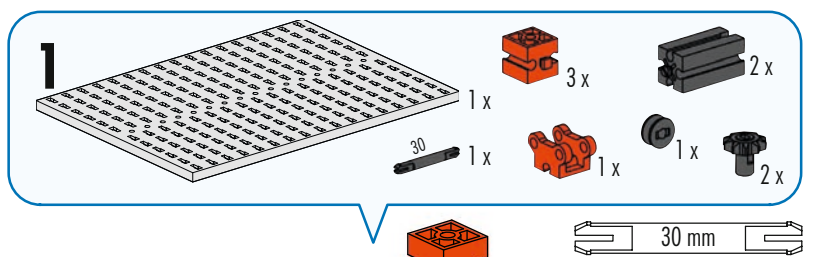


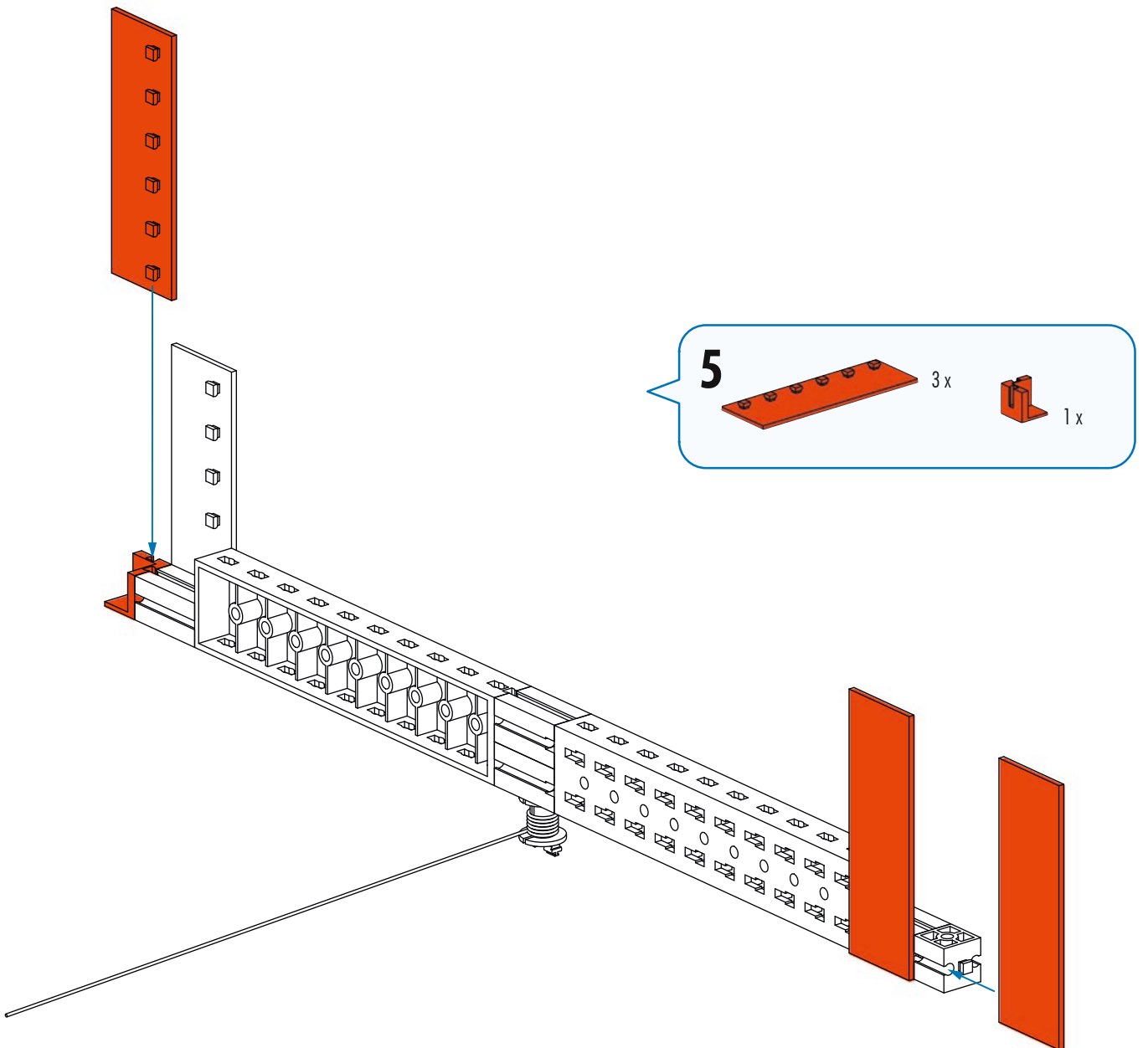
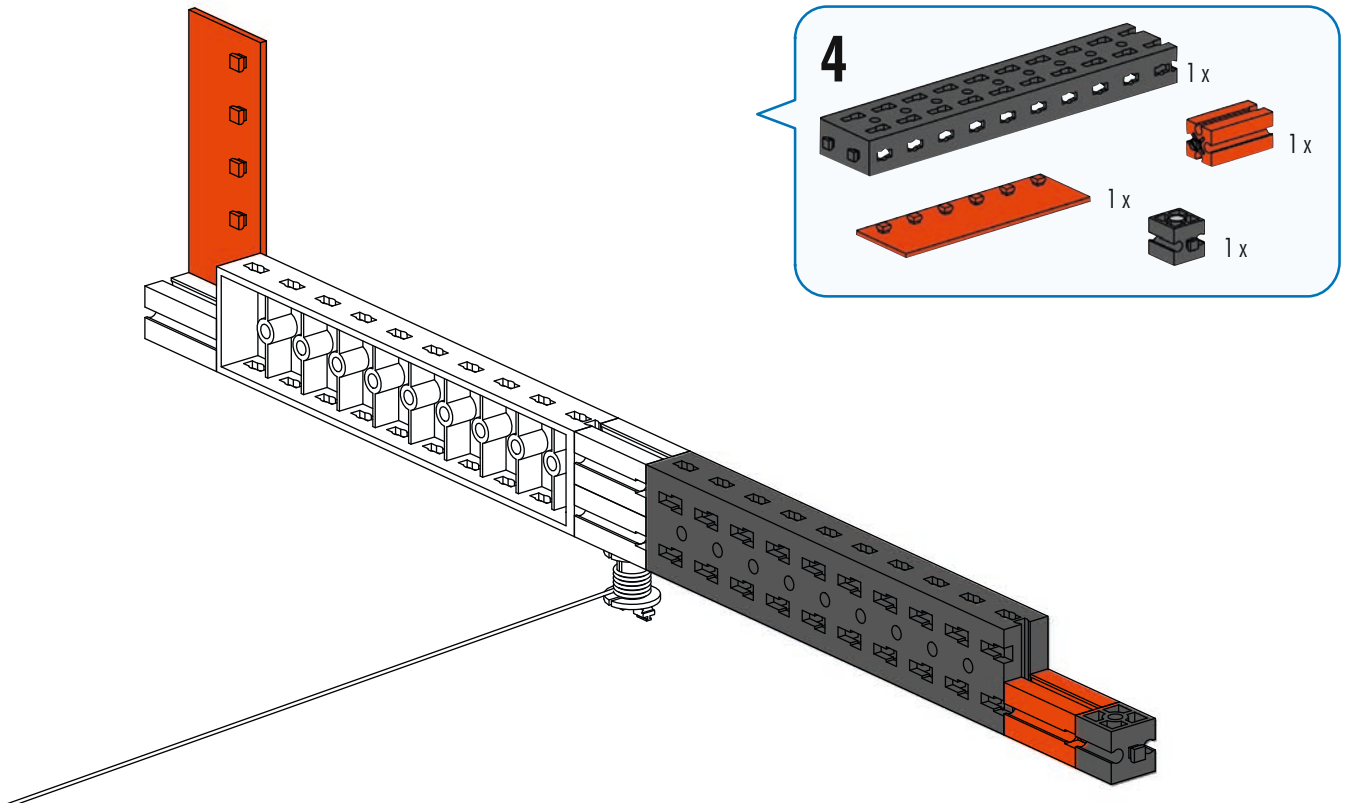


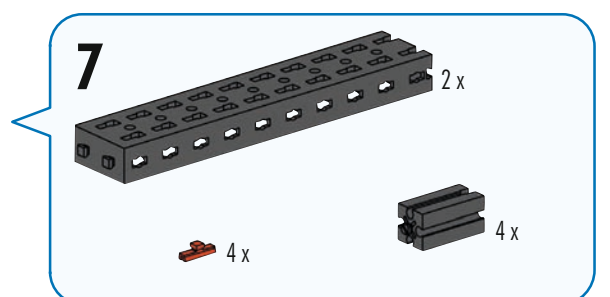
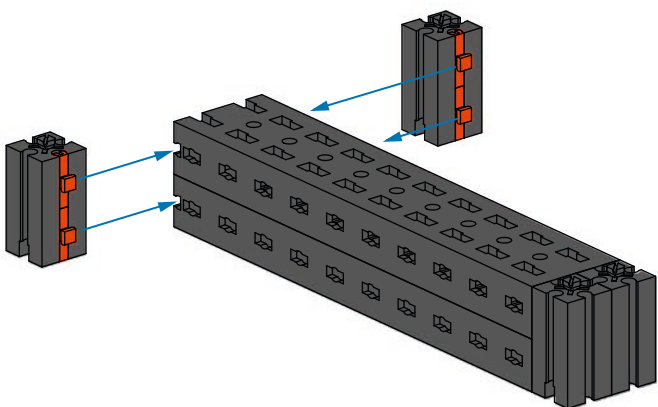
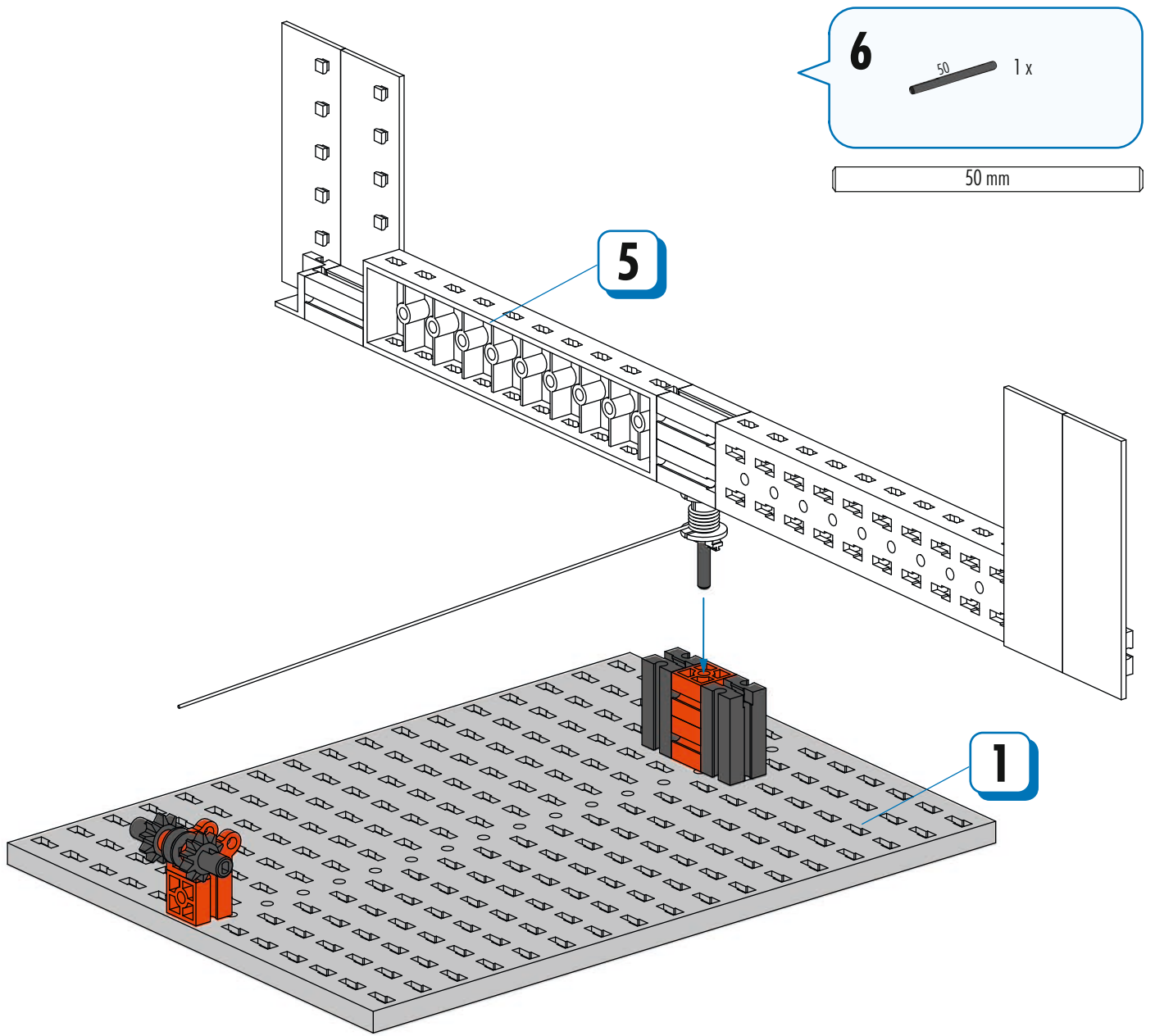
Drehausleger
Rotary feeder
Potence rotative


Roterende giek
Plumín giratorio
Braço ou alimentador
rotativo

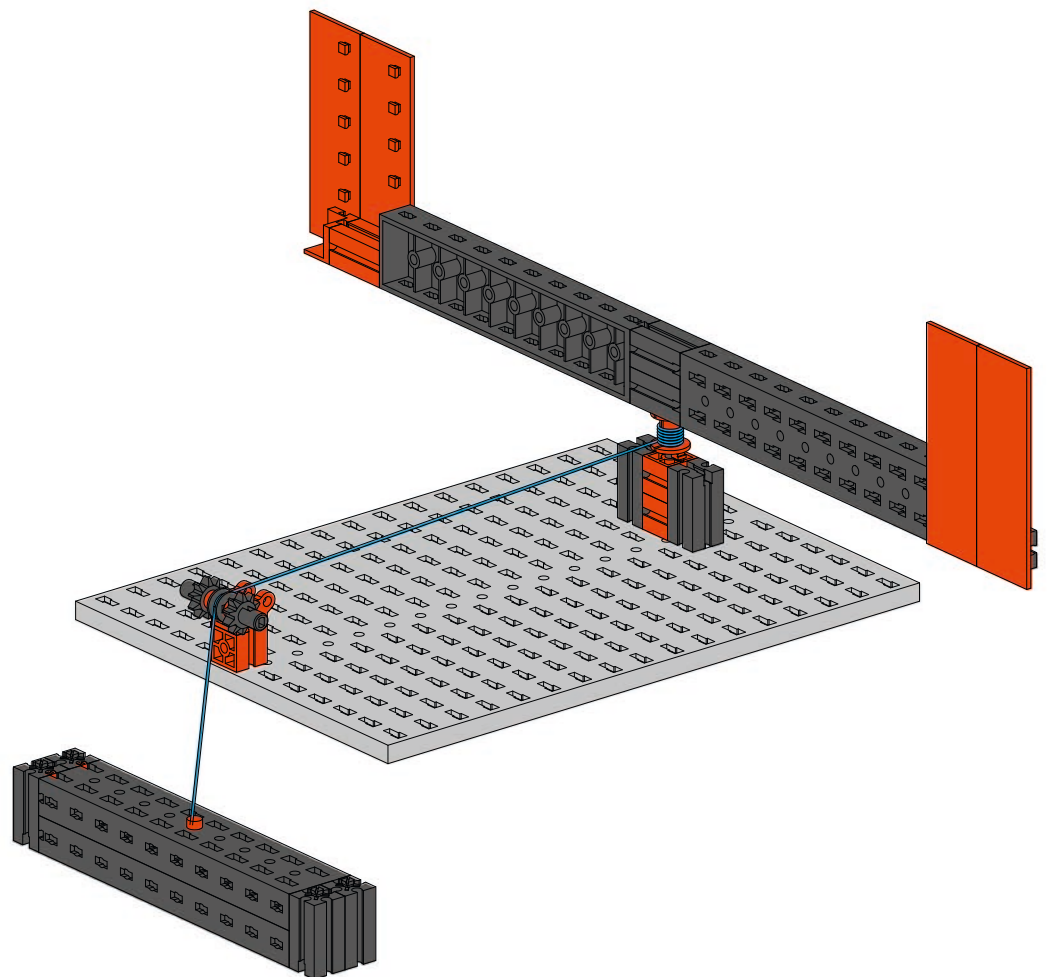
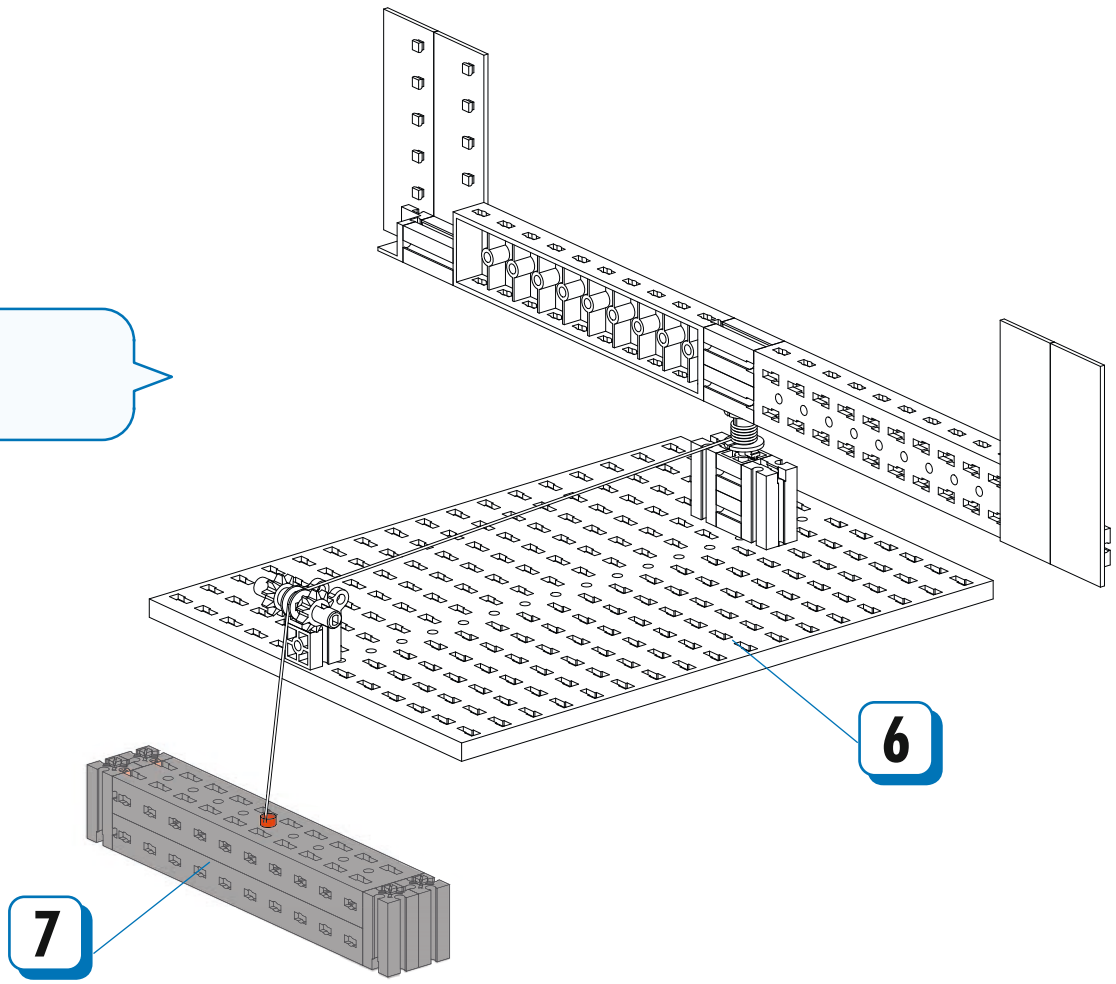
Asta rotante
Вертушка
旋转给料器

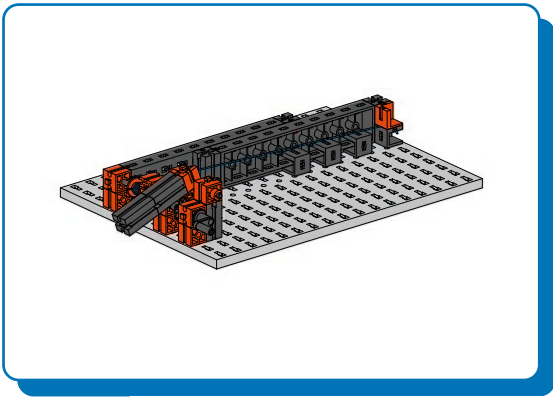






8  1x

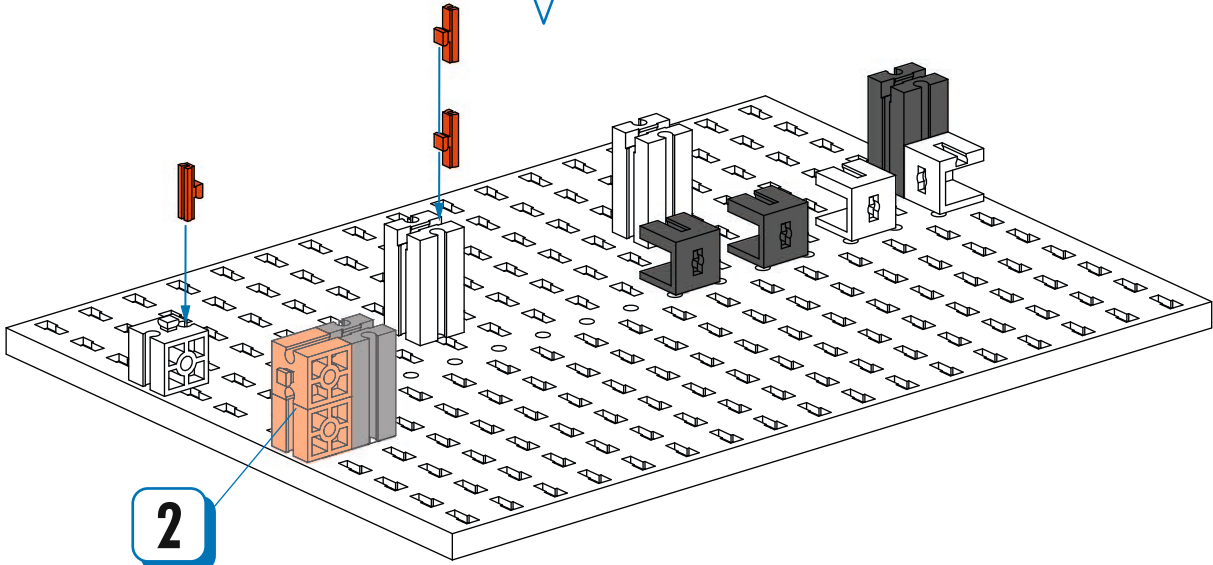
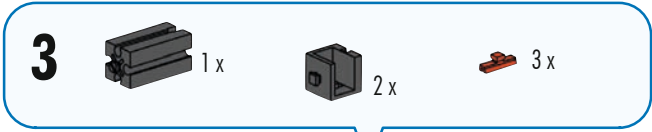
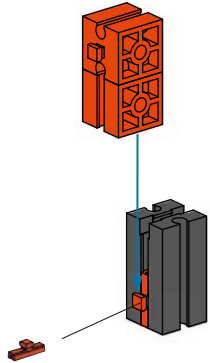
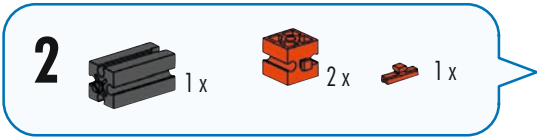
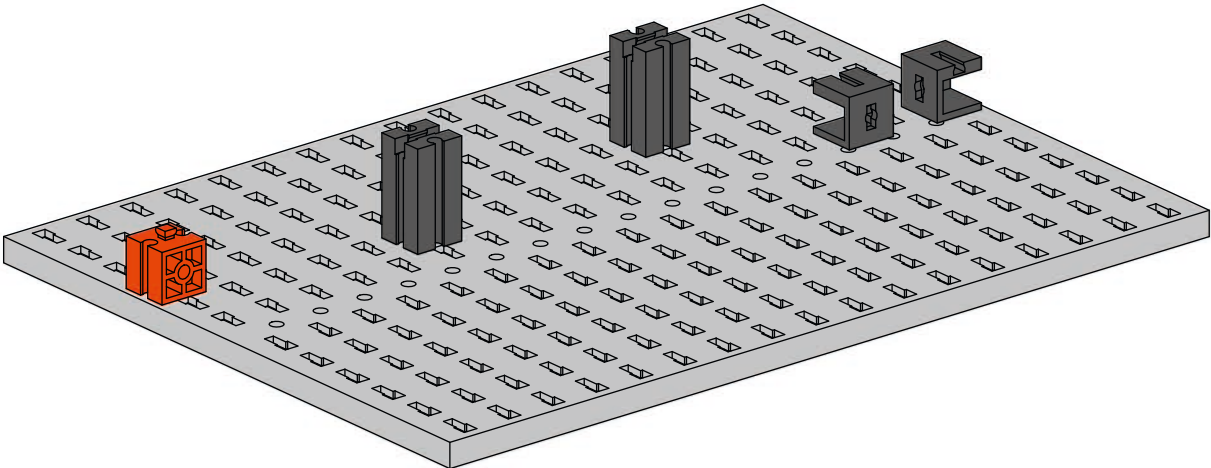
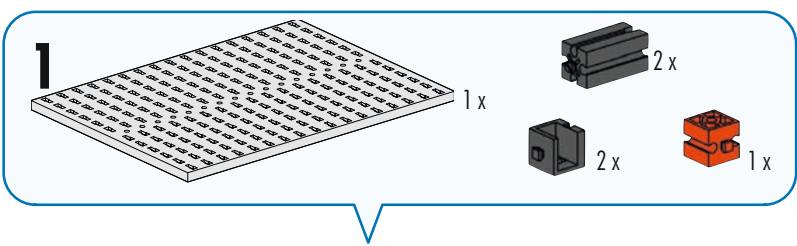


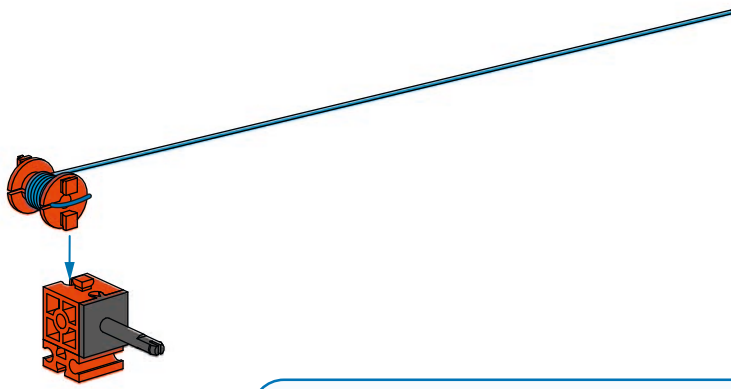


Saite
String
Corde

String
Cadena
Cordas

Fune
Музыкальный
инструмент
字符串



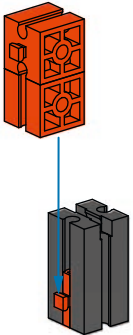
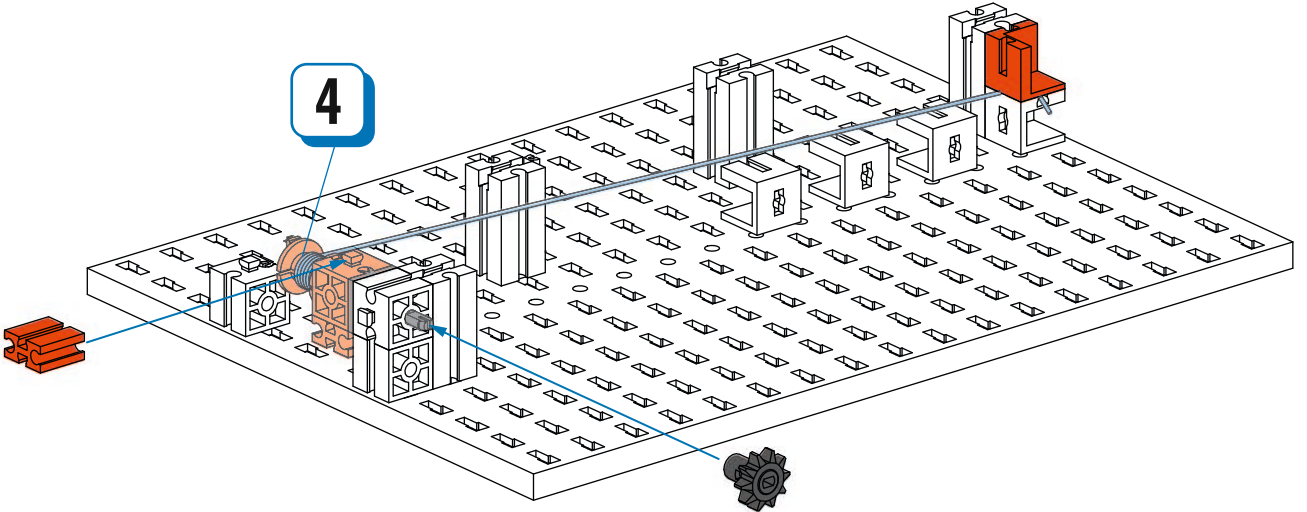


4

- 1x [Red 2x2 Technic Brick]
- 1x [Grey Technic Pin]
- 1x [Red 1x3 Technic Beam]
- 1x [Red Technic Axle Connector]
- 1x [Blue String]

5

- 1x [Red L-shaped Technic Connector]
- 1x [Red 1x3 Technic Beam]
- 1x [Grey Technic Pin]

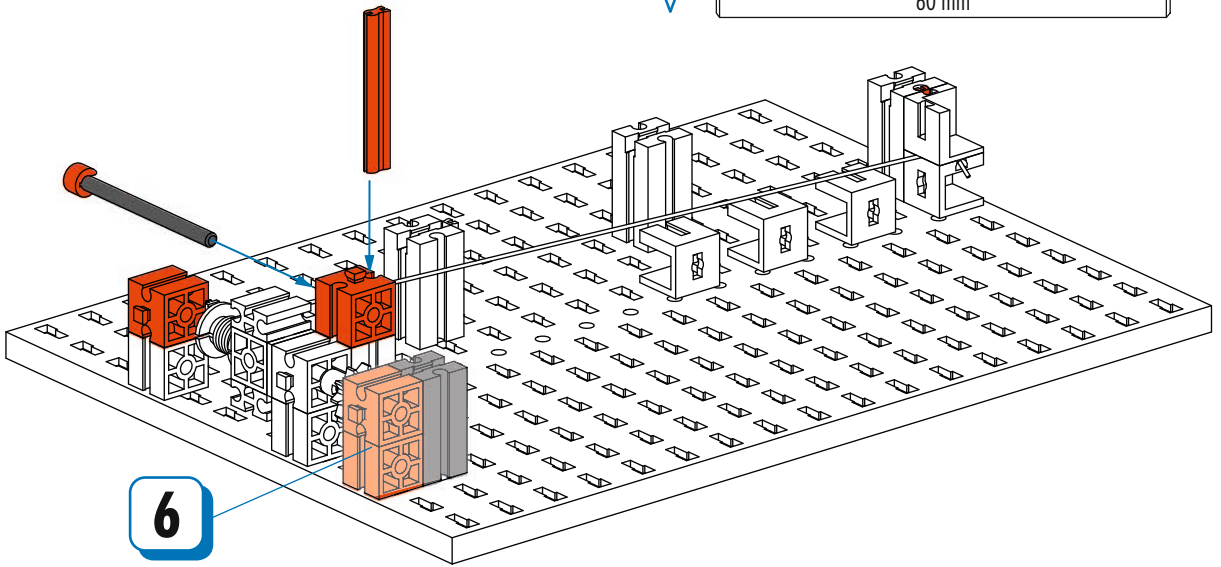
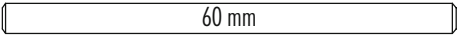


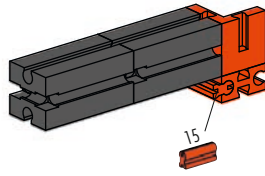
6

- 1x [Grey Technic Pin]
- 2x [Red 2x2 Technic Brick]
- 1x [Red Technic Axle Connector]

7

- 2x [Red 2x2 Technic Brick]
- 1x [Red Technic Axle Connector]
- 1x [Red Technic Beam, length 45]
- 1x [Grey Technic Pin, length 60]



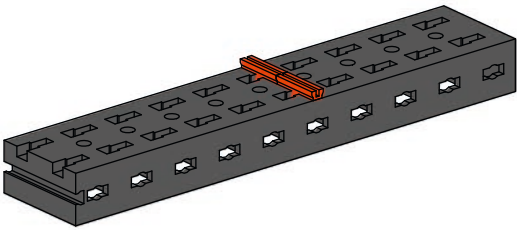
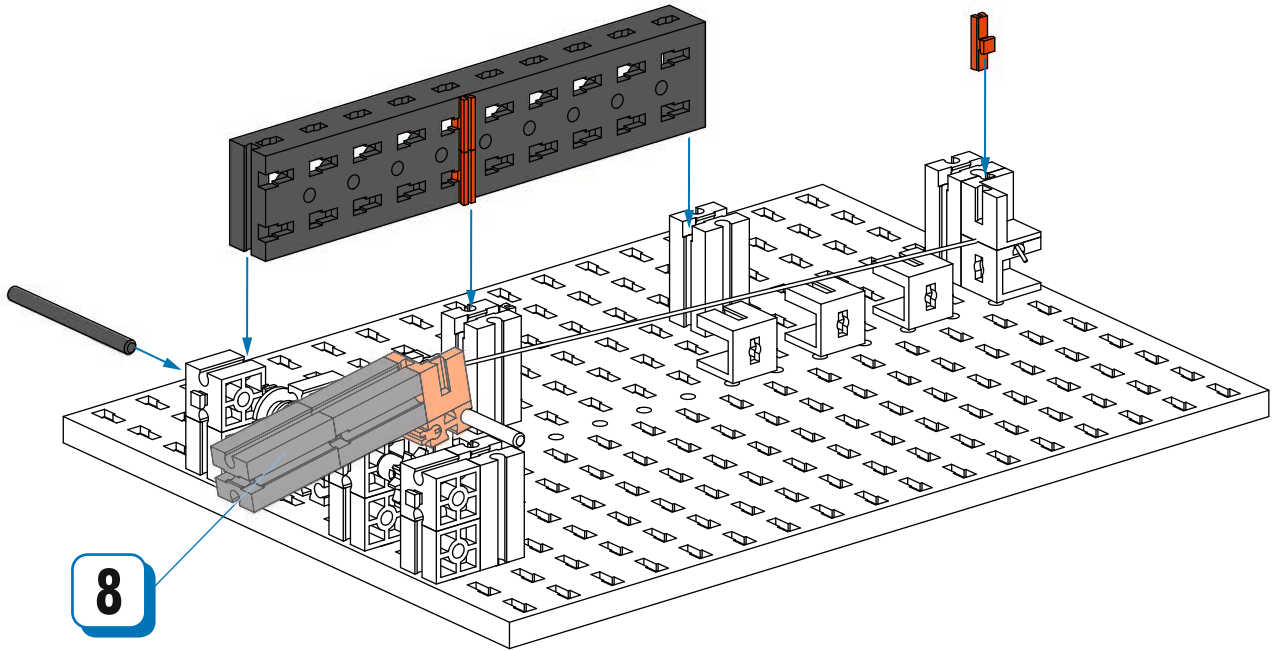
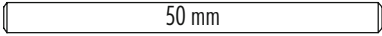


8

- 2 x [Grey beam]
- 1 x [Orange L-shaped connector]
- 1 x [Orange 1x3 Technic pin]
- 1 x [Orange 15-length Technic pin]

9

- 1 x [Grey 1x10 Technic beam]
- 3 x [Orange 1x3 Technic pin]
- 1 x [Grey 50-length Technic pin]



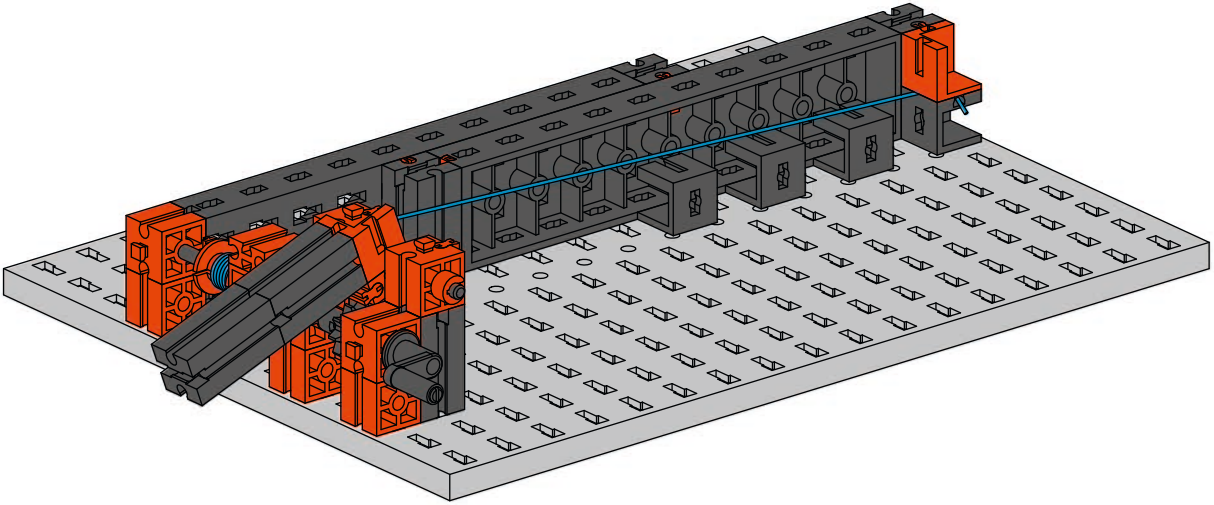
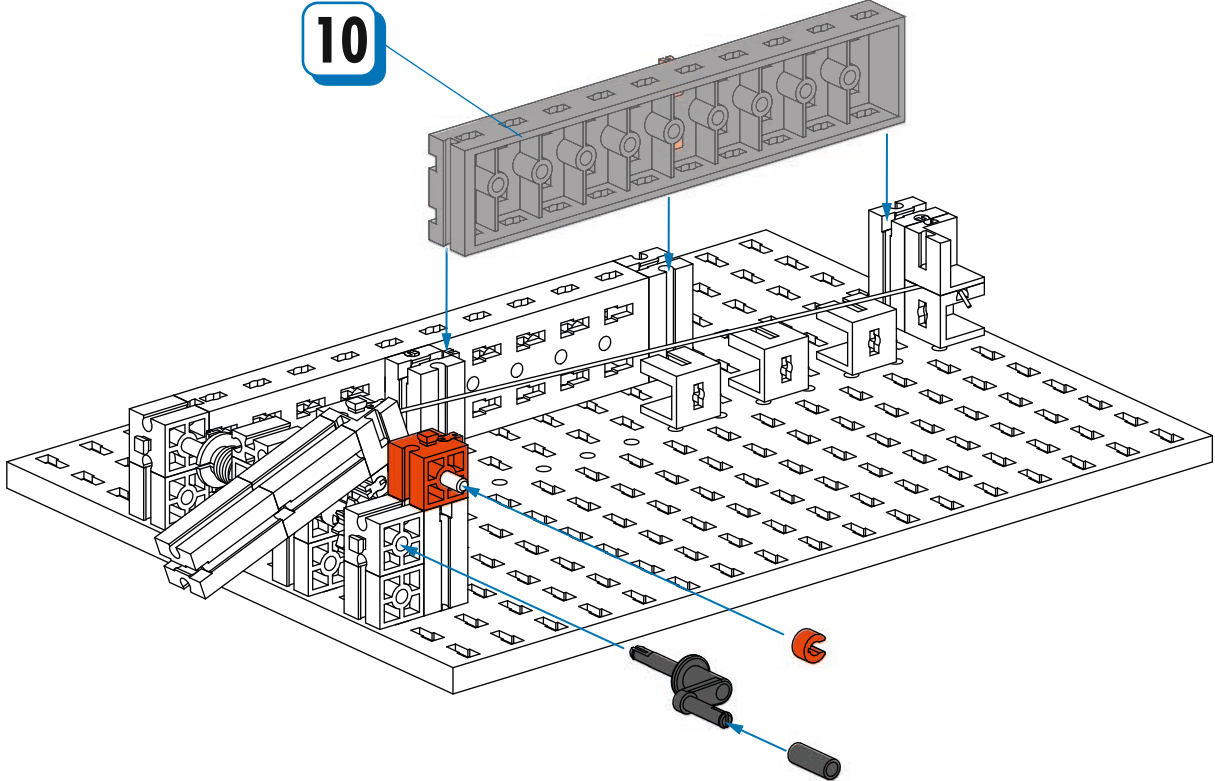
10

- 1 x [Grey 1x10 Technic beam]
- 2 x [Orange 1x3 Technic pin]

11

- 1 x
- 1 x
- 1 x
- 1 x
- 1 x

30 mm





Kuglexperiment
Sphere experiment
Expérience de la boule

Bol experiment
Experimento de la esfera
Experimento em esfera

Esperimento della sfera
Эксперимент с шариком
球体实验

1



1x



1x

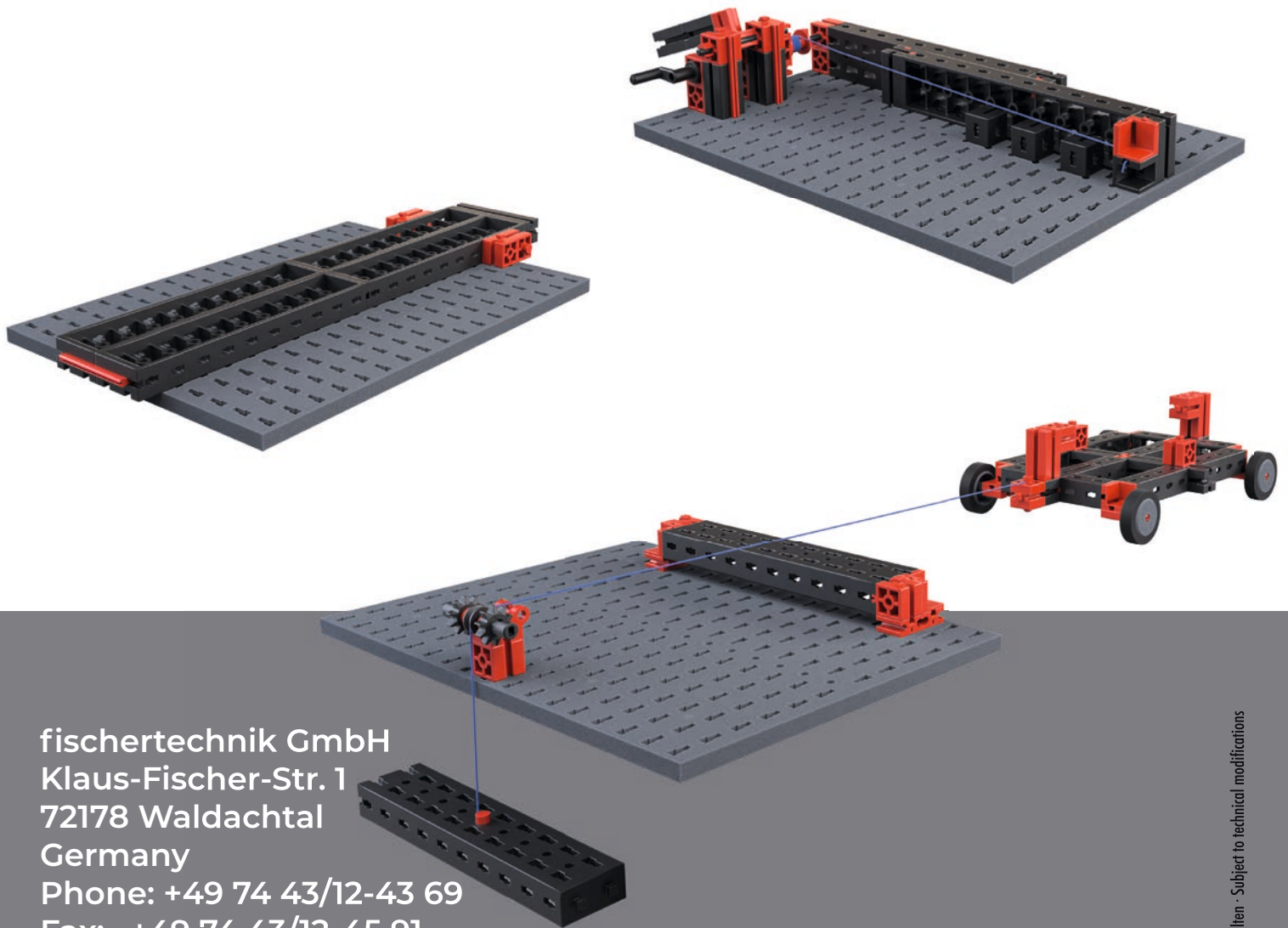


1x



STEM Smart Physics

SECONDARY SCHOOL



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