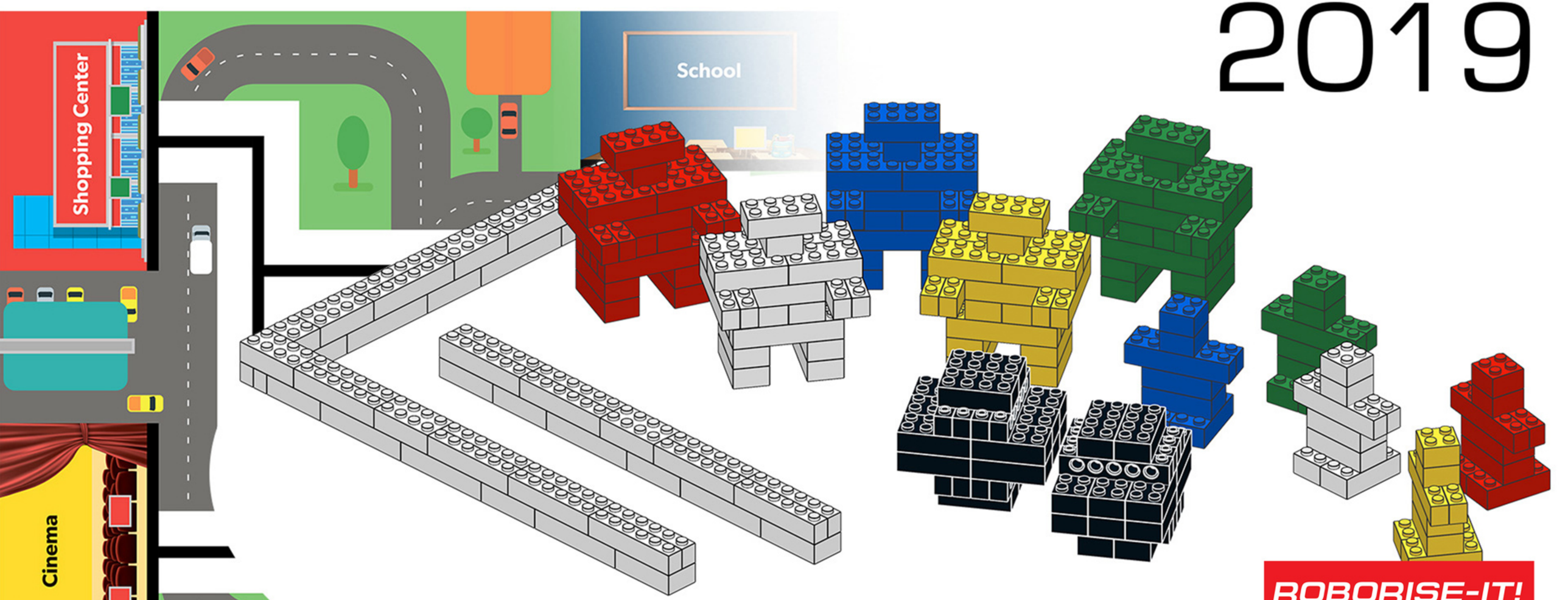
WRO™ Elementary

WORLD ROBOT OLYMPIAD

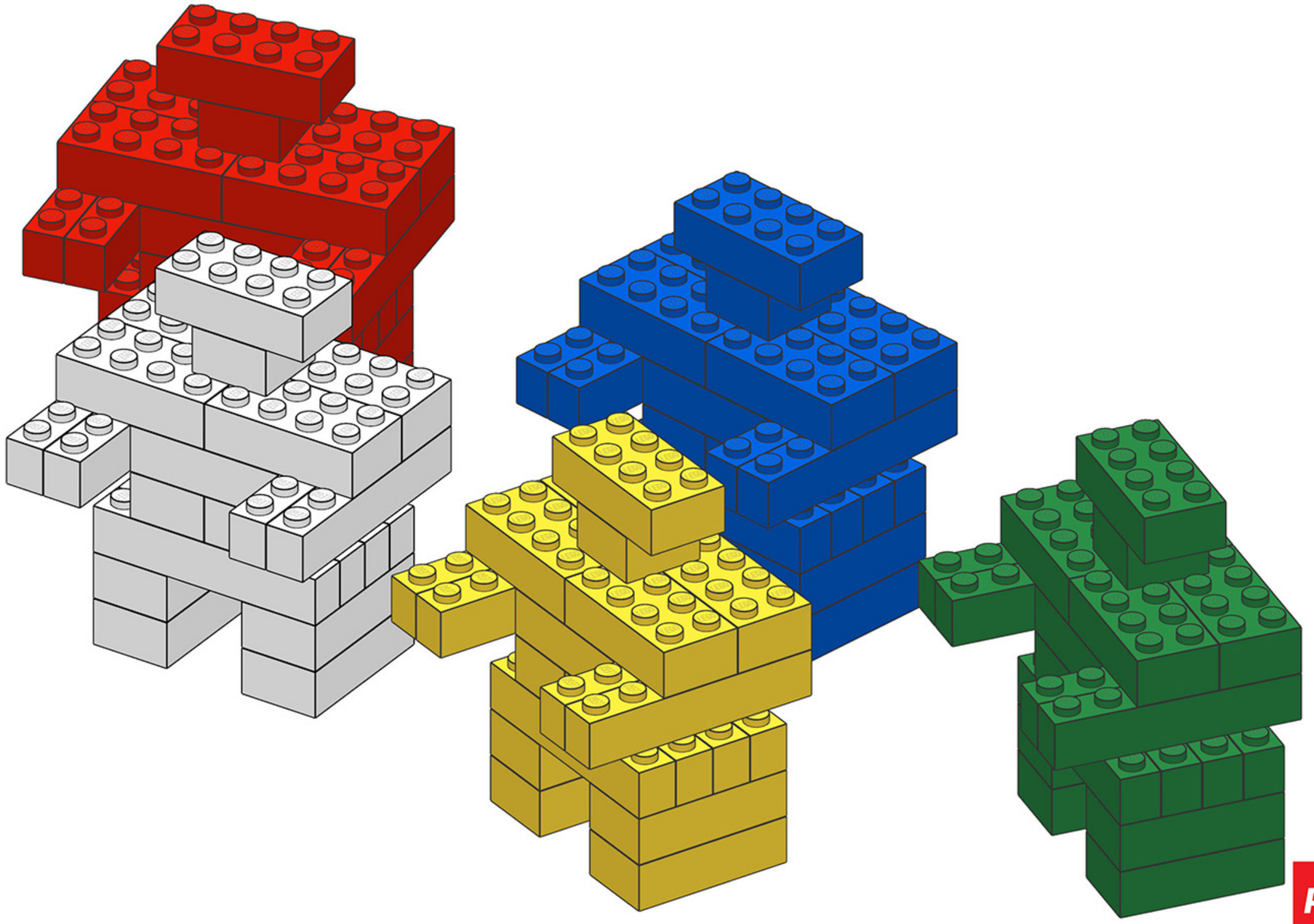
2019



World Robot Olympiad and the WRO logo are trademarks of the World Robot Olympiad Association Ltd. © 2019 World Robot Olympiad Association Ltd.
LEGO, the LEGO logo, MINDSTORMS, the Brick and Knob configurations are trademarks of the LEGO Group. © 2019 The LEGO Group. All rights reserved.

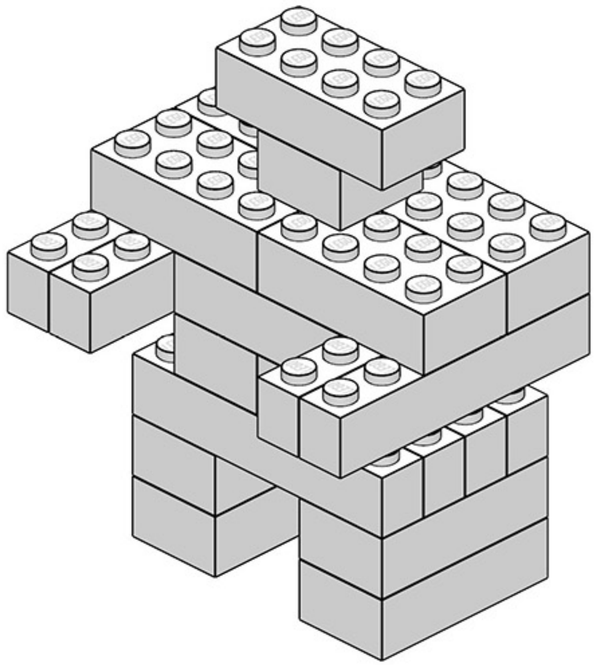
ROBORISE-IT!

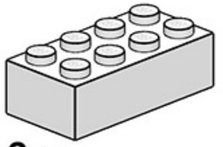
ROBOTIC EDUCATION



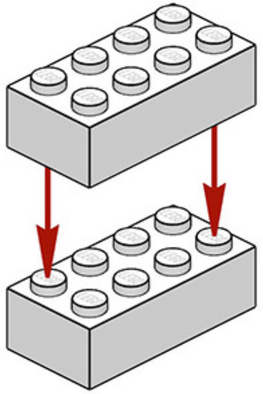
World Robot Olympiad and the WRO logo are trademarks of the World Robot Olympiad Association Ltd. © 2019 World Robot Olympiad Association Ltd.
LEGO, the LEGO logo, MINDSTORMS, the Brick and Knob configurations are trademarks of the LEGO Group. © 2019 The LEGO Group. All rights reserved.

ROBORISE-IT!
ROBOTIC EDUCATION



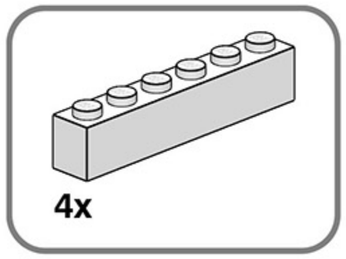


1

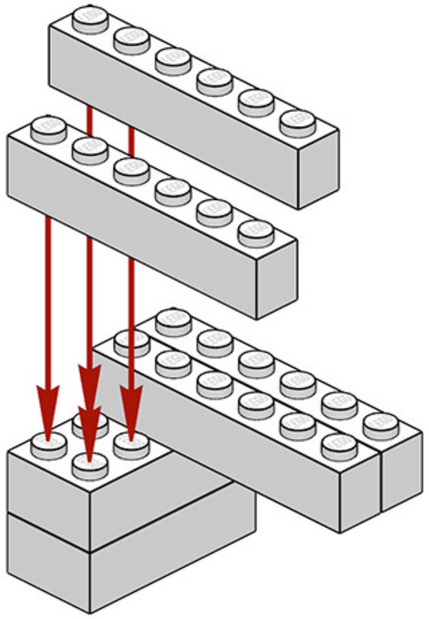


World Robot Olympiad and the WRO logo are trademarks of the World Robot Olympiad Association Ltd. © 2019 World Robot Olympiad Association Ltd.
LEGO, the LEGO logo, MINDSTORMS, the Brick and Knob configurations are trademarks of the LEGO Group. © 2019 The LEGO Group. All rights reserved.

ROBORISE-IT!
ROBOTIC EDUCATION

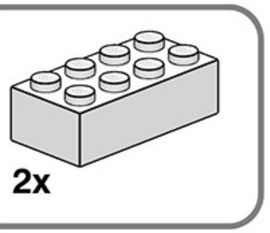


2

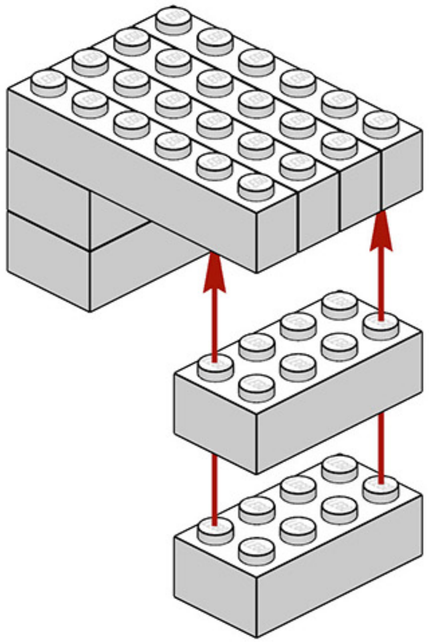


World Robot Olympiad and the WRO logo are trademarks of the World Robot Olympiad Association Ltd. © 2019 World Robot Olympiad Association Ltd.
LEGO, the LEGO logo, MINDSTORMS, the Brick and Knob configurations are trademarks of the LEGO Group. © 2019 The LEGO Group. All rights reserved.

ROBORISE-IT!
ROBOTIC EDUCATION

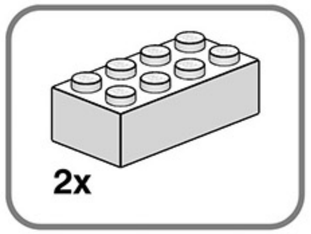


3

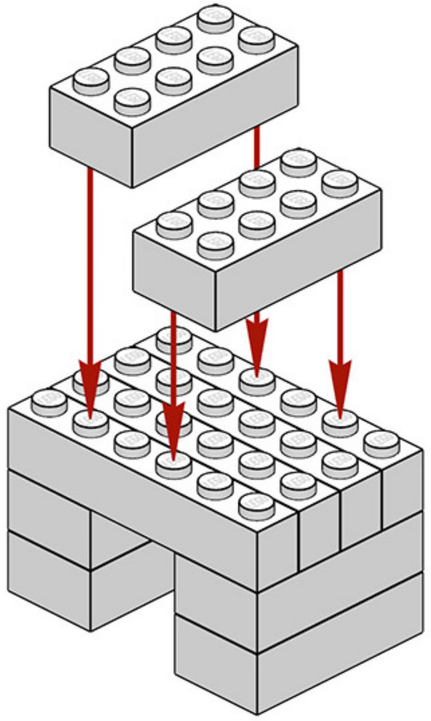


World Robot Olympiad and the WRO logo are trademarks of the World Robot Olympiad Association Ltd. © 2019 World Robot Olympiad Association Ltd.
LEGO, the LEGO logo, MINDSTORMS, the Brick and Knob configurations are trademarks of the LEGO Group. © 2019 The LEGO Group. All rights reserved.

ROBORISE-IT!
ROBOTIC EDUCATION

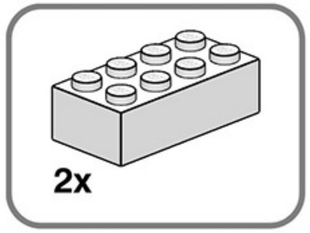


4

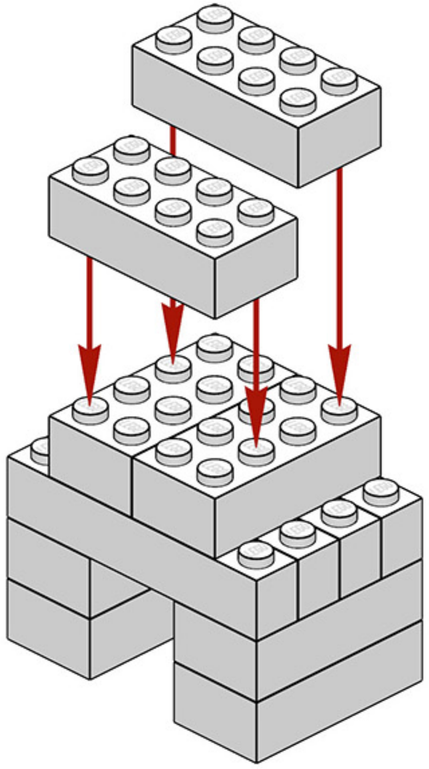


World Robot Olympiad and the WRO logo are trademarks of the World Robot Olympiad Association Ltd. © 2019 World Robot Olympiad Association Ltd.
LEGO, the LEGO logo, MINDSTORMS, the Brick and Knob configurations are trademarks of the LEGO Group. © 2019 The LEGO Group. All rights reserved.

ROBORISE-IT!
ROBOTIC EDUCATION



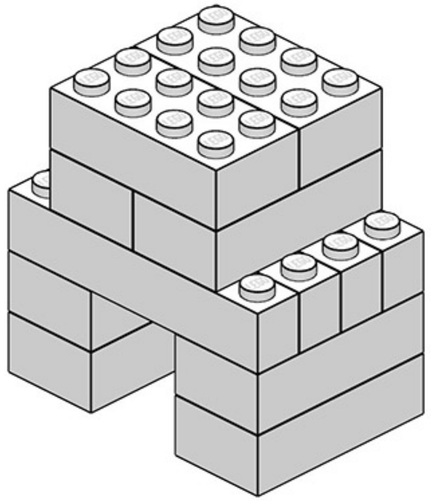
5



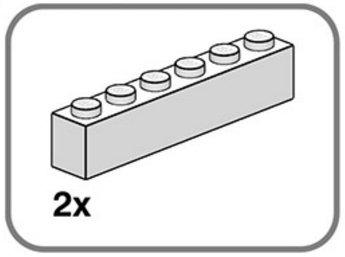
World Robot Olympiad and the WRO logo are trademarks of the World Robot Olympiad Association Ltd. © 2019 World Robot Olympiad Association Ltd.
LEGO, the LEGO logo, MINDSTORMS, the Brick and Knob configurations are trademarks of the LEGO Group. © 2019 The LEGO Group. All rights reserved.

ROBORISE-IT!
ROBOTIC EDUCATION

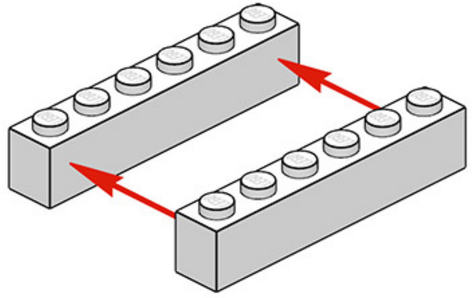
6

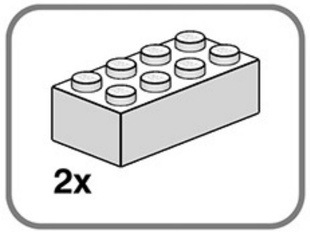


World Robot Olympiad and the WRO logo are trademarks of the World Robot Olympiad Association Ltd. © 2019 World Robot Olympiad Association Ltd.
LEGO, the LEGO logo, MINDSTORMS, the Brick and Knob configurations are trademarks of the LEGO Group. © 2019 The LEGO Group. All rights reserved.

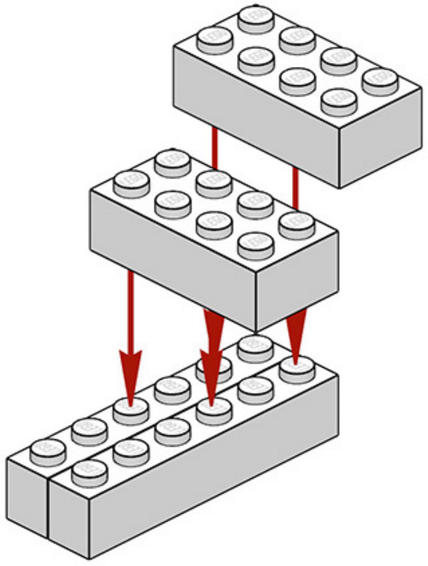


1

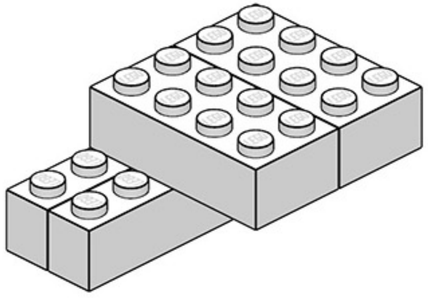




2



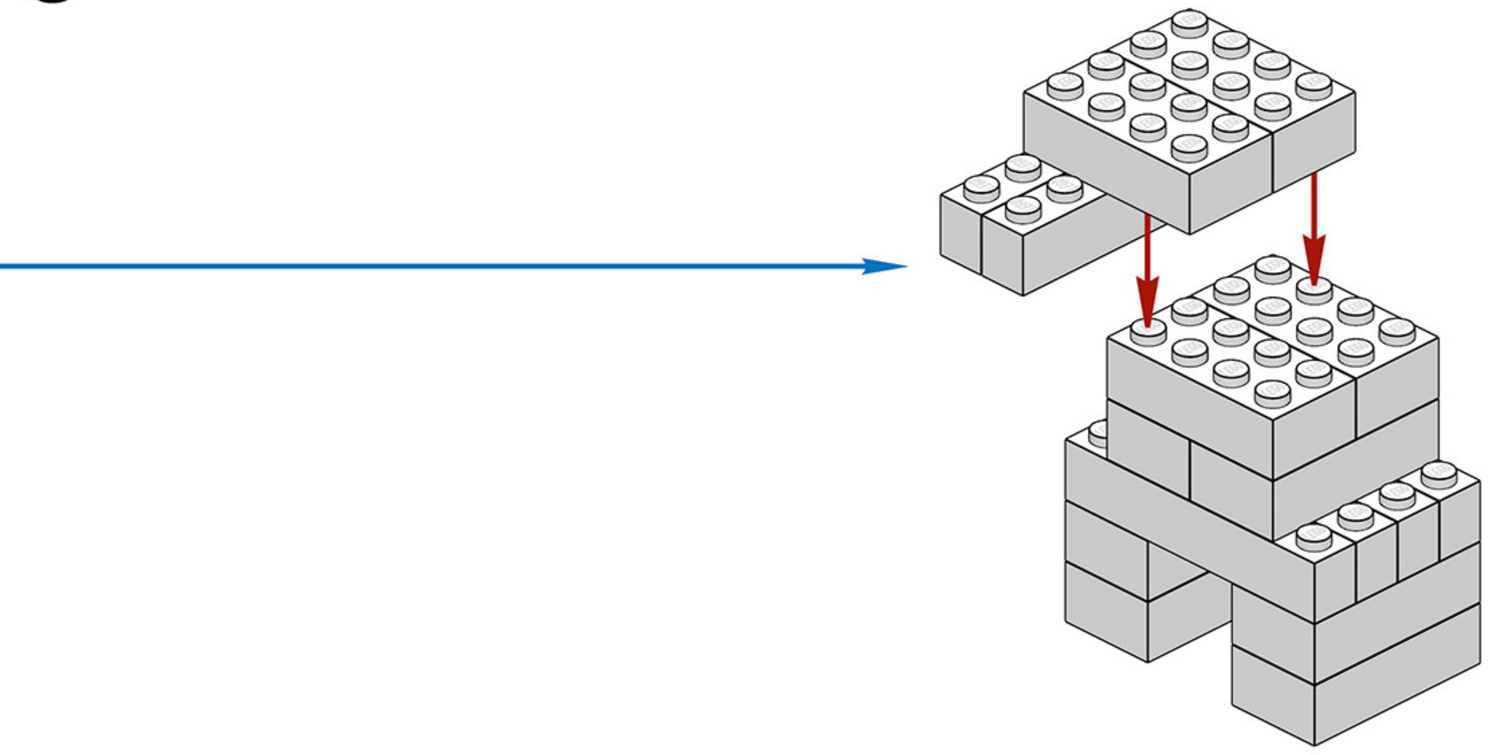
3



World Robot Olympiad and the WRO logo are trademarks of the World Robot Olympiad Association Ltd. © 2019 World Robot Olympiad Association Ltd.
LEGO, the LEGO logo, MINDSTORMS, the Brick and Knob configurations are trademarks of the LEGO Group. © 2019 The LEGO Group. All rights reserved.

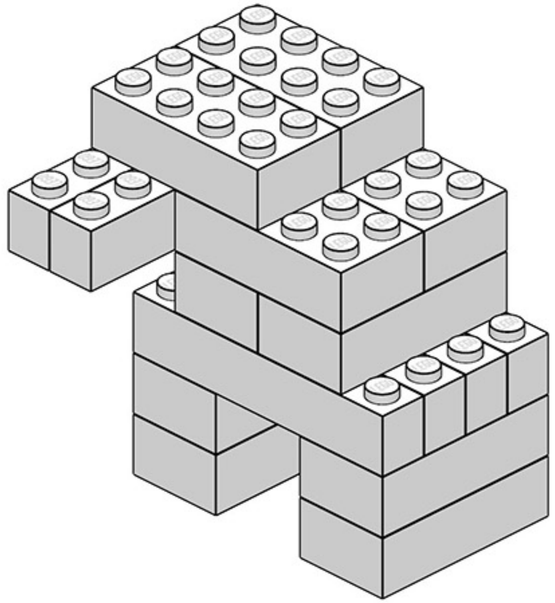
ROBORISE-IT!
ROBOTIC EDUCATION

8



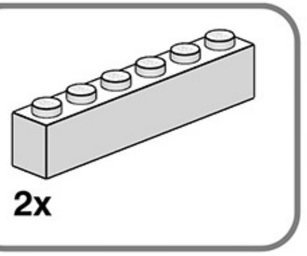
World Robot Olympiad and the WRO logo are trademarks of the World Robot Olympiad Association Ltd. © 2019 World Robot Olympiad Association Ltd.
LEGO, the LEGO logo, MINDSTORMS, the Brick and Knob configurations are trademarks of the LEGO Group. © 2019 The LEGO Group. All rights reserved.

9

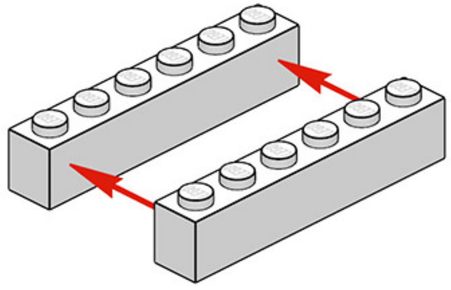


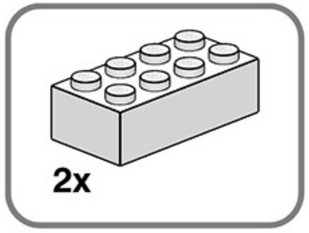
World Robot Olympiad and the WRO logo are trademarks of the World Robot Olympiad Association Ltd. © 2019 World Robot Olympiad Association Ltd.
LEGO, the LEGO logo, MINDSTORMS, the Brick and Knob configurations are trademarks of the LEGO Group. © 2019 The LEGO Group. All rights reserved.

ROBORISE-IT!
ROBOTIC EDUCATION

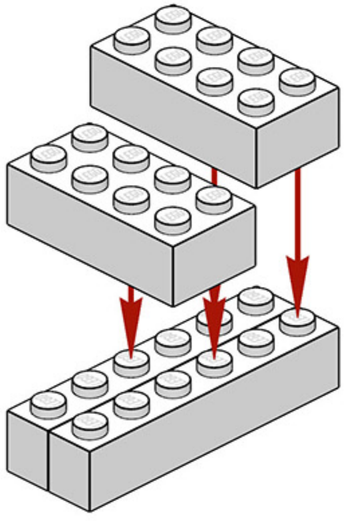


1

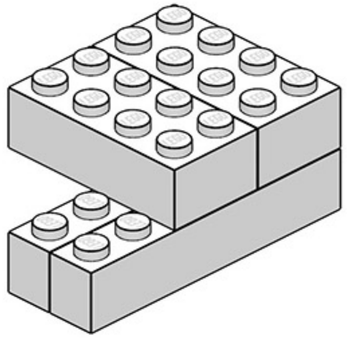




2



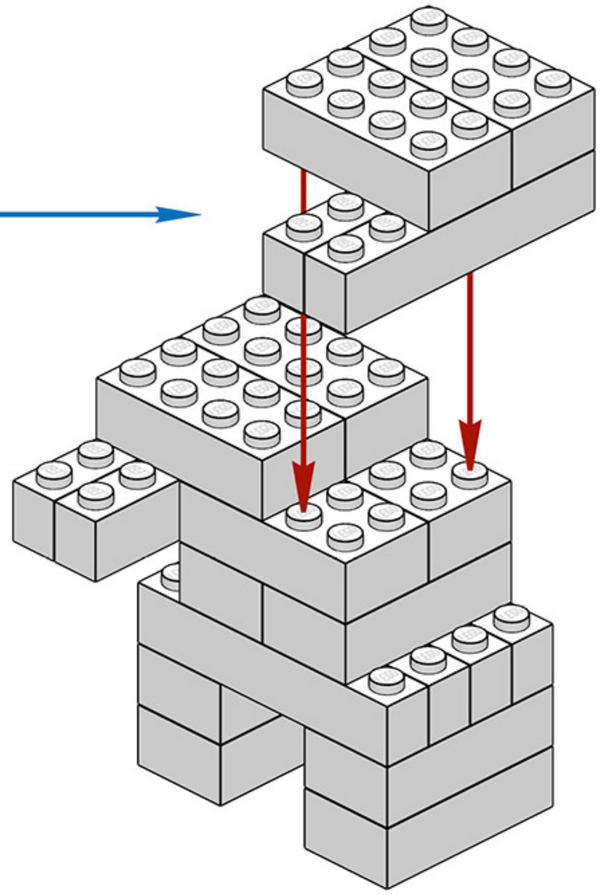
3



World Robot Olympiad and the WRO logo are trademarks of the World Robot Olympiad Association Ltd. © 2019 World Robot Olympiad Association Ltd.
LEGO, the LEGO logo, MINDSTORMS, the Brick and Knob configurations are trademarks of the LEGO Group. © 2019 The LEGO Group. All rights reserved.

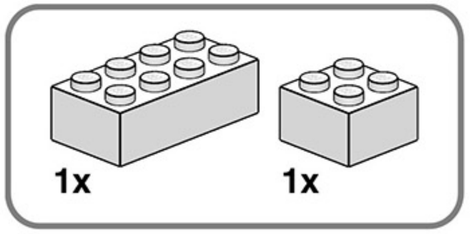
ROBORISE-IT!
ROBOTIC EDUCATION

11

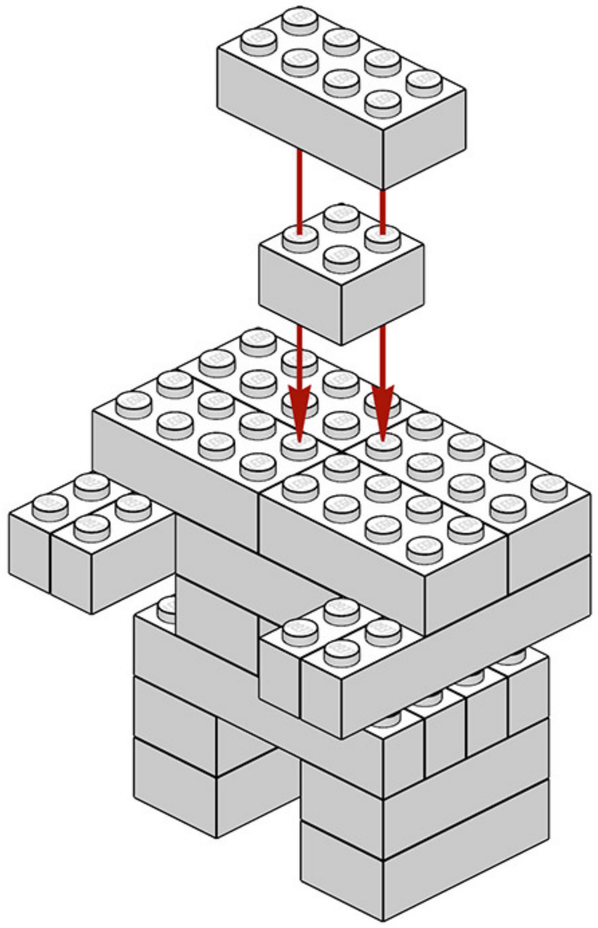


World Robot Olympiad and the WRO logo are trademarks of the World Robot Olympiad Association Ltd. © 2019 World Robot Olympiad Association Ltd.
LEGO, the LEGO logo, MINDSTORMS, the Brick and Knob configurations are trademarks of the LEGO Group. © 2019 The LEGO Group. All rights reserved.

ROBORISE-IT!
ROBOTIC EDUCATION



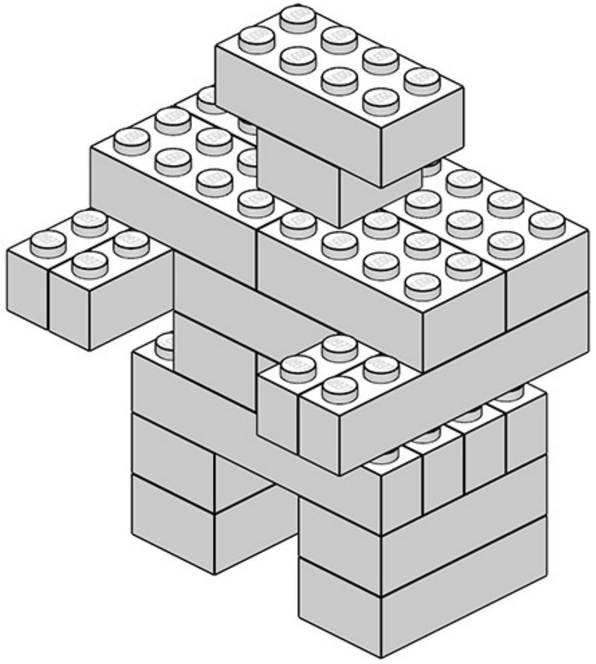
12



World Robot Olympiad and the WRO logo are trademarks of the World Robot Olympiad Association Ltd. © 2019 World Robot Olympiad Association Ltd.
LEGO, the LEGO logo, MINDSTORMS, the Brick and Knob configurations are trademarks of the LEGO Group. © 2019 The LEGO Group. All rights reserved.

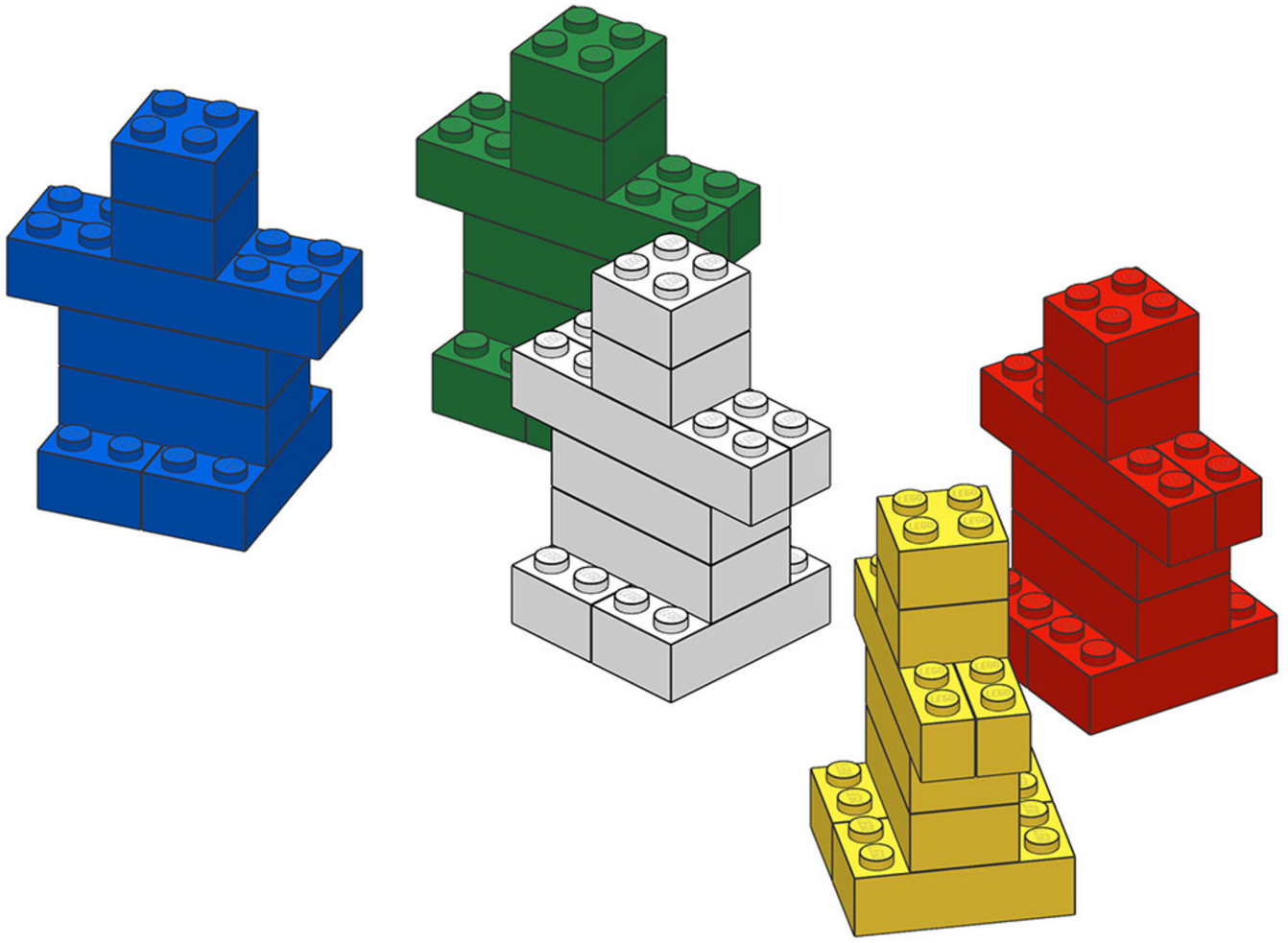
ROBORISE-IT!
ROBOTIC EDUCATION

13



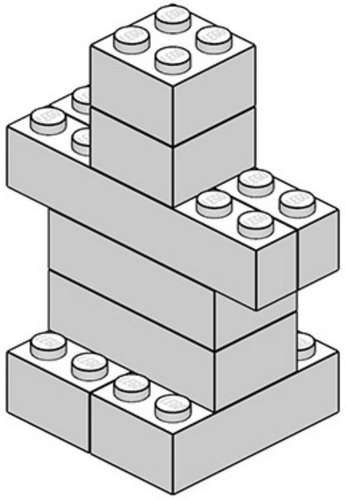
World Robot Olympiad and the WRO logo are trademarks of the World Robot Olympiad Association Ltd. © 2019 World Robot Olympiad Association Ltd.
LEGO, the LEGO logo, MINDSTORMS, the Brick and Knob configurations are trademarks of the LEGO Group. © 2019 The LEGO Group. All rights reserved.

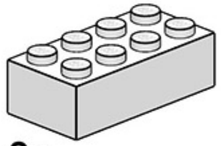
ROBORISE-IT!
ROBOTIC EDUCATION



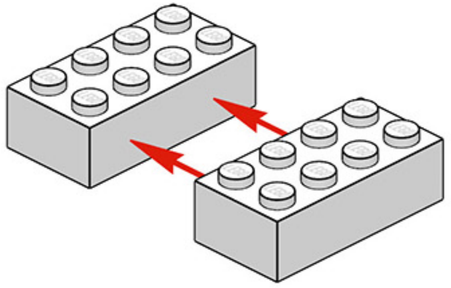
World Robot Olympiad and the WRO logo are trademarks of the World Robot Olympiad Association Ltd. © 2019 World Robot Olympiad Association Ltd.
LEGO, the LEGO logo, MINDSTORMS, the Brick and Knob configurations are trademarks of the LEGO Group. © 2019 The LEGO Group. All rights reserved.

ROBORISE-IT!
ROBOTIC EDUCATION



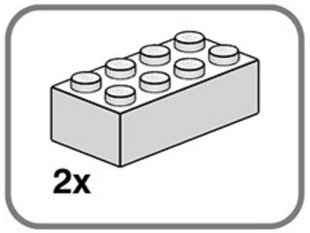


1

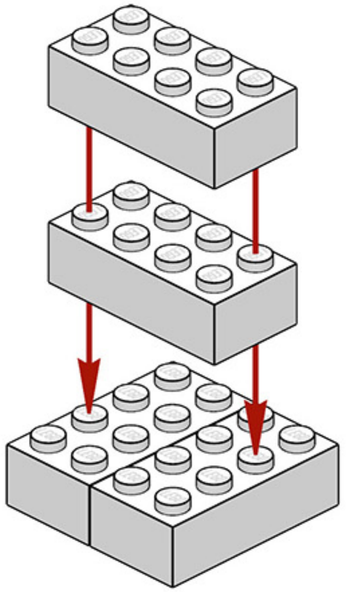


World Robot Olympiad and the WRO logo are trademarks of the World Robot Olympiad Association Ltd. © 2019 World Robot Olympiad Association Ltd.
LEGO, the LEGO logo, MINDSTORMS, the Brick and Knob configurations are trademarks of the LEGO Group. © 2019 The LEGO Group. All rights reserved.

ROBORISE-IT!
ROBOTIC EDUCATION

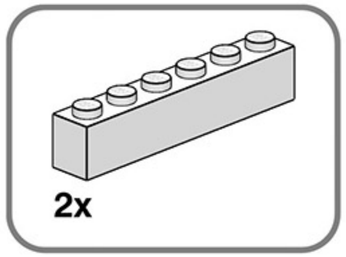


2

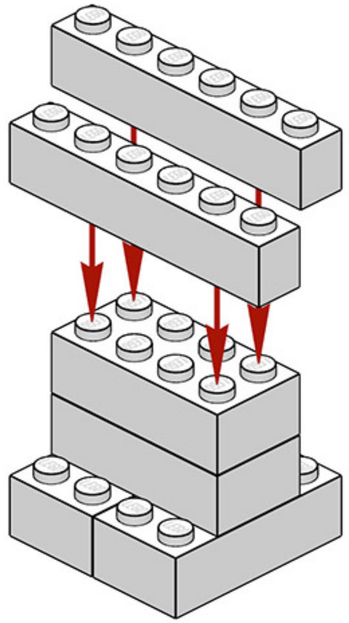


World Robot Olympiad and the WRO logo are trademarks of the World Robot Olympiad Association Ltd. © 2019 World Robot Olympiad Association Ltd.
LEGO, the LEGO logo, MINDSTORMS, the Brick and Knob configurations are trademarks of the LEGO Group. © 2019 The LEGO Group. All rights reserved.

ROBORISE-IT!
ROBOTIC EDUCATION

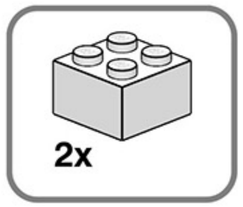


3

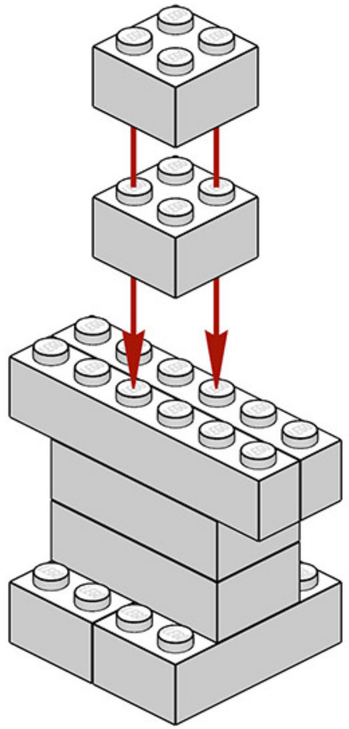


World Robot Olympiad and the WRO logo are trademarks of the World Robot Olympiad Association Ltd. © 2019 World Robot Olympiad Association Ltd.
LEGO, the LEGO logo, MINDSTORMS, the Brick and Knob configurations are trademarks of the LEGO Group. © 2019 The LEGO Group. All rights reserved.

ROBORISE-IT!
ROBOTIC EDUCATION



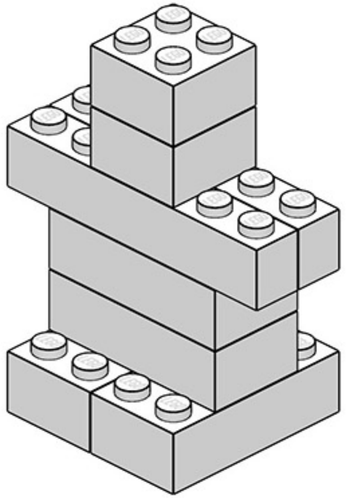
4



World Robot Olympiad and the WRO logo are trademarks of the World Robot Olympiad Association Ltd. © 2019 World Robot Olympiad Association Ltd.
LEGO, the LEGO logo, MINDSTORMS, the Brick and Knob configurations are trademarks of the LEGO Group. © 2019 The LEGO Group. All rights reserved.

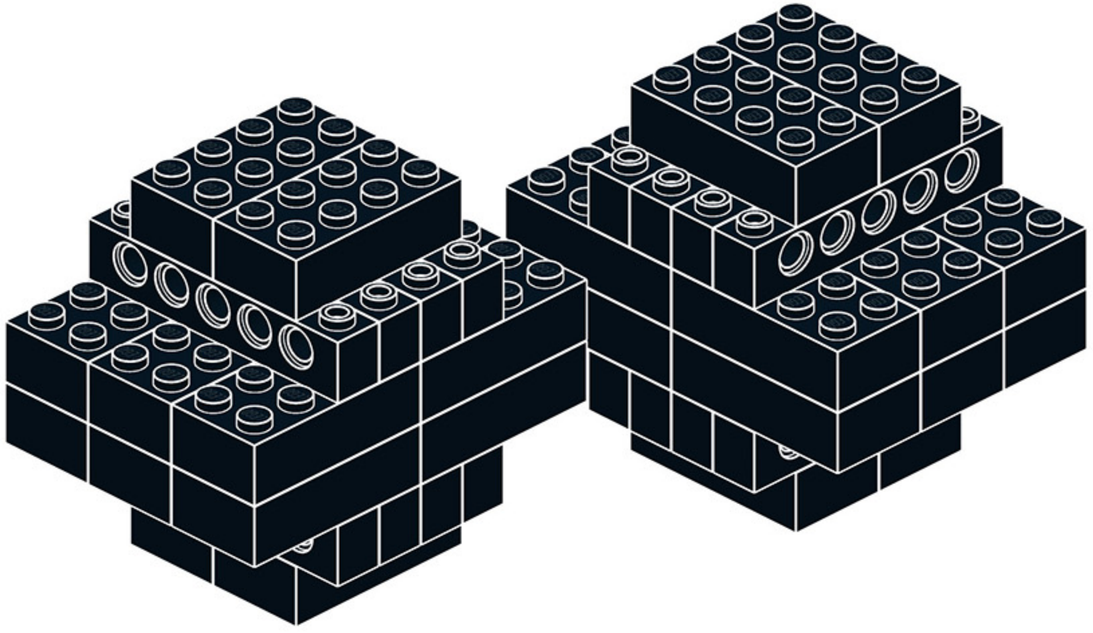
ROBORISE-IT!
ROBOTIC EDUCATION

5

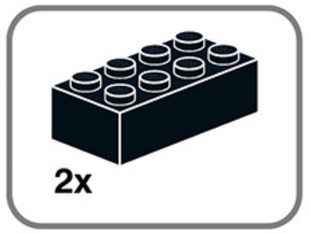


World Robot Olympiad and the WRO logo are trademarks of the World Robot Olympiad Association Ltd. © 2019 World Robot Olympiad Association Ltd.
LEGO, the LEGO logo, MINDSTORMS, the Brick and Knob configurations are trademarks of the LEGO Group. © 2019 The LEGO Group. All rights reserved.

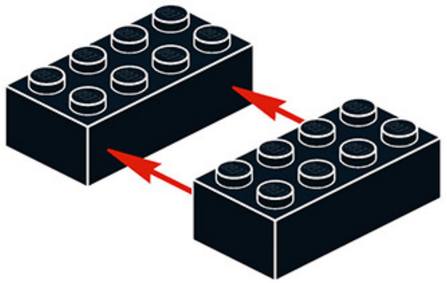
ROBORISE-IT!
ROBOTIC EDUCATION



World Robot Olympiad and the WRO logo are trademarks of the World Robot Olympiad Association Ltd. © 2019 World Robot Olympiad Association Ltd.
LEGO, the LEGO logo, MINDSTORMS, the Brick and Knob configurations are trademarks of the LEGO Group. © 2019 The LEGO Group. All rights reserved.

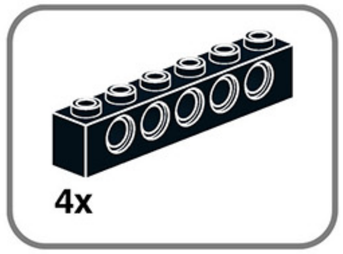


1

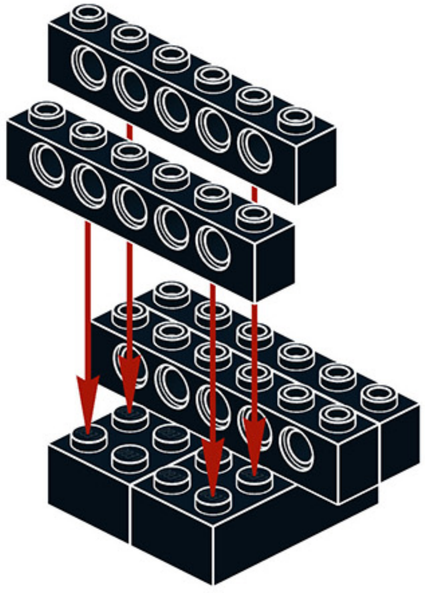


World Robot Olympiad and the WRO logo are trademarks of the World Robot Olympiad Association Ltd. © 2019 World Robot Olympiad Association Ltd.
LEGO, the LEGO logo, MINDSTORMS, the Brick and Knob configurations are trademarks of the LEGO Group. © 2019 The LEGO Group. All rights reserved.

ROBORISE-IT!
ROBOTIC EDUCATION

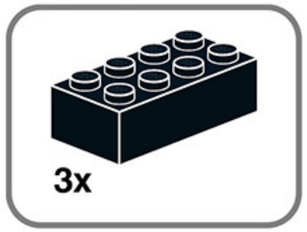


2

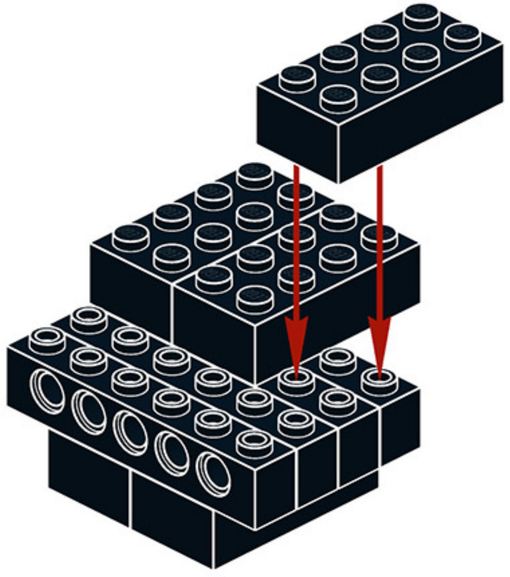


World Robot Olympiad and the WRO logo are trademarks of the World Robot Olympiad Association Ltd. © 2019 World Robot Olympiad Association Ltd.
LEGO, the LEGO logo, MINDSTORMS, the Brick and Knob configurations are trademarks of the LEGO Group. © 2019 The LEGO Group. All rights reserved.

ROBORISE-IT!
ROBOTIC EDUCATION

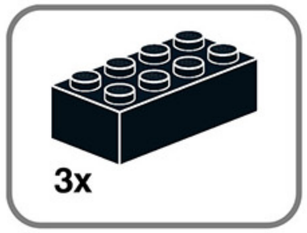


3

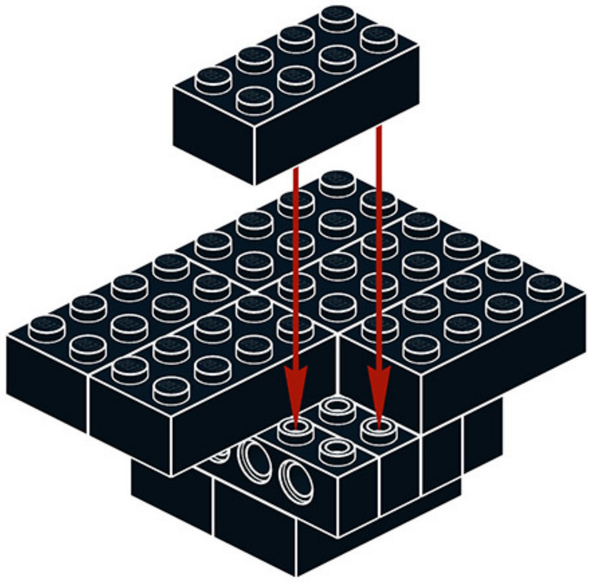


World Robot Olympiad and the WRO logo are trademarks of the World Robot Olympiad Association Ltd. © 2019 World Robot Olympiad Association Ltd.
LEGO, the LEGO logo, MINDSTORMS, the Brick and Knob configurations are trademarks of the LEGO Group. © 2019 The LEGO Group. All rights reserved.

ROBORISE-IT!
ROBOTIC EDUCATION

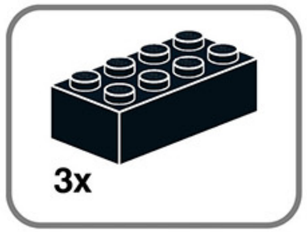


4

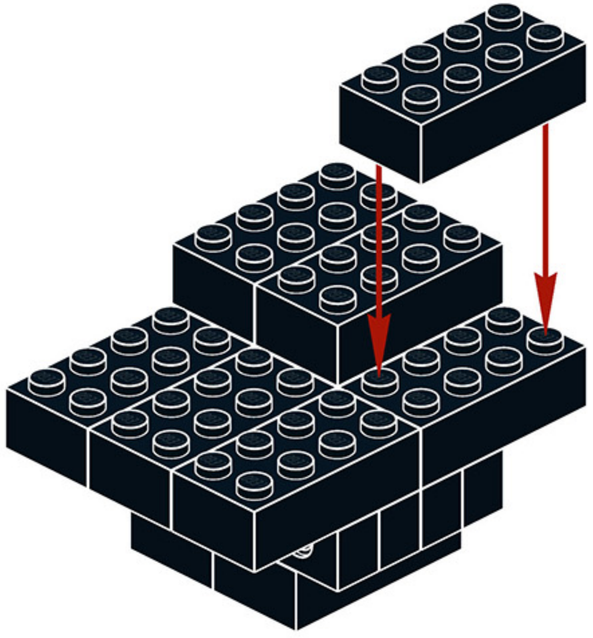


World Robot Olympiad and the WRO logo are trademarks of the World Robot Olympiad Association Ltd. © 2019 World Robot Olympiad Association Ltd.
LEGO, the LEGO logo, MINDSTORMS, the Brick and Knob configurations are trademarks of the LEGO Group. © 2019 The LEGO Group. All rights reserved.

ROBORISE-IT!
ROBOTIC EDUCATION

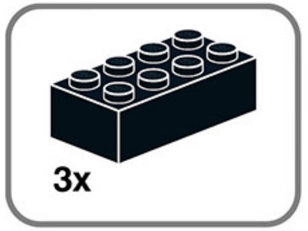


5

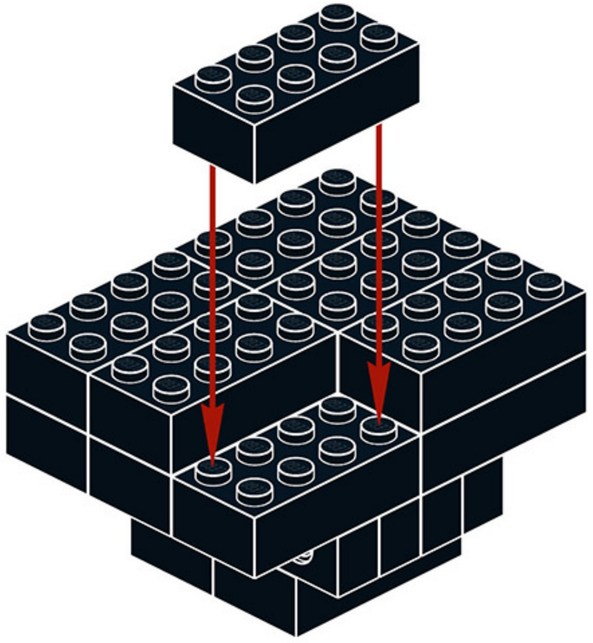


World Robot Olympiad and the WRO logo are trademarks of the World Robot Olympiad Association Ltd. © 2019 World Robot Olympiad Association Ltd.
LEGO, the LEGO logo, MINDSTORMS, the Brick and Knob configurations are trademarks of the LEGO Group. © 2019 The LEGO Group. All rights reserved.

ROBORISE-IT!
ROBOTIC EDUCATION

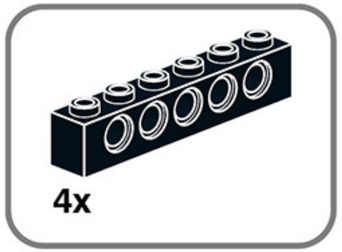


6

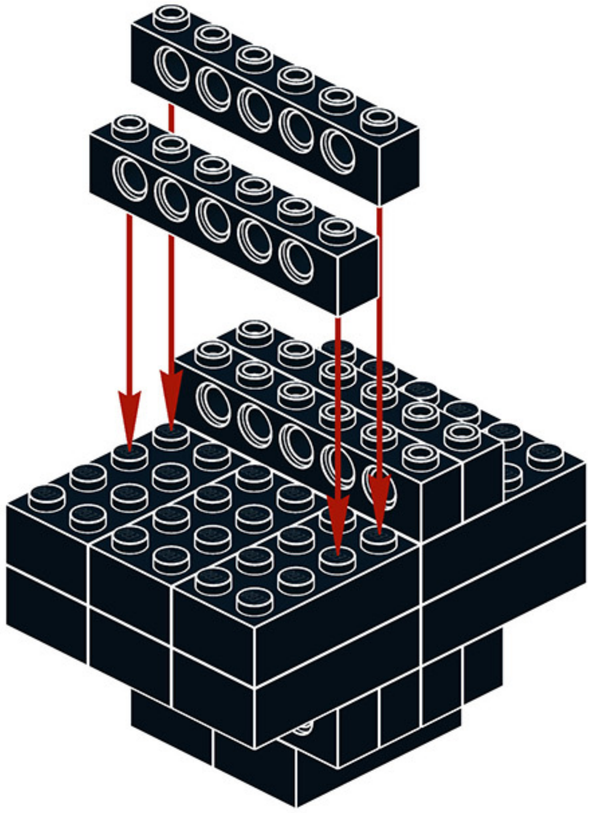


World Robot Olympiad and the WRO logo are trademarks of the World Robot Olympiad Association Ltd. © 2019 World Robot Olympiad Association Ltd.
LEGO, the LEGO logo, MINDSTORMS, the Brick and Knob configurations are trademarks of the LEGO Group. © 2019 The LEGO Group. All rights reserved.

ROBORISE-IT!
ROBOTIC EDUCATION

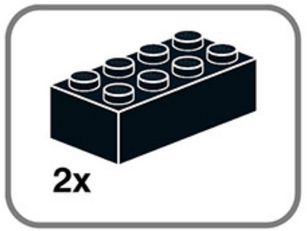


7

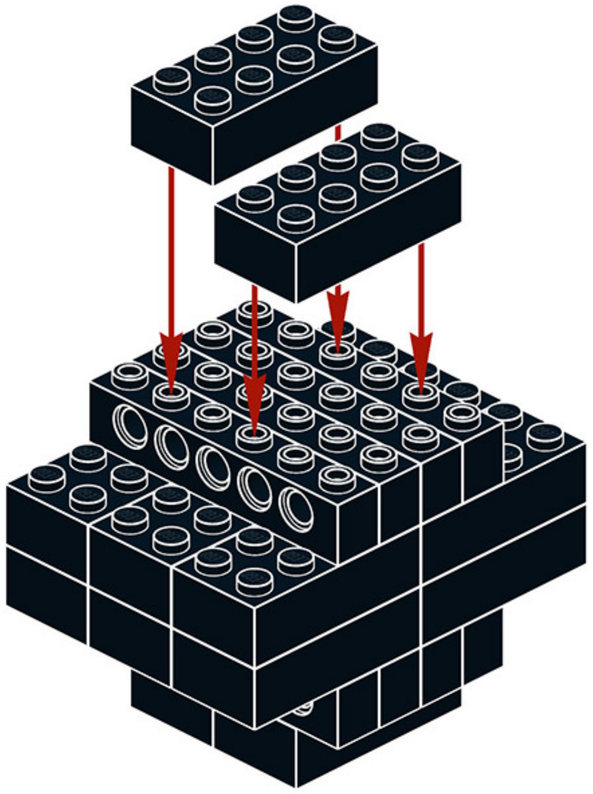


World Robot Olympiad and the WRO logo are trademarks of the World Robot Olympiad Association Ltd. © 2019 World Robot Olympiad Association Ltd.
LEGO, the LEGO logo, MINDSTORMS, the Brick and Knob configurations are trademarks of the LEGO Group. © 2019 The LEGO Group. All rights reserved.

ROBORISE-IT!
ROBOTIC EDUCATION



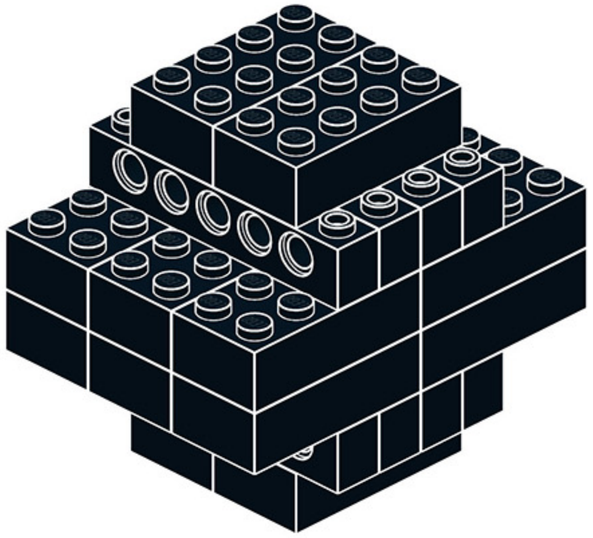
8



World Robot Olympiad and the WRO logo are trademarks of the World Robot Olympiad Association Ltd. © 2019 World Robot Olympiad Association Ltd.
LEGO, the LEGO logo, MINDSTORMS, the Brick and Knob configurations are trademarks of the LEGO Group. © 2019 The LEGO Group. All rights reserved.

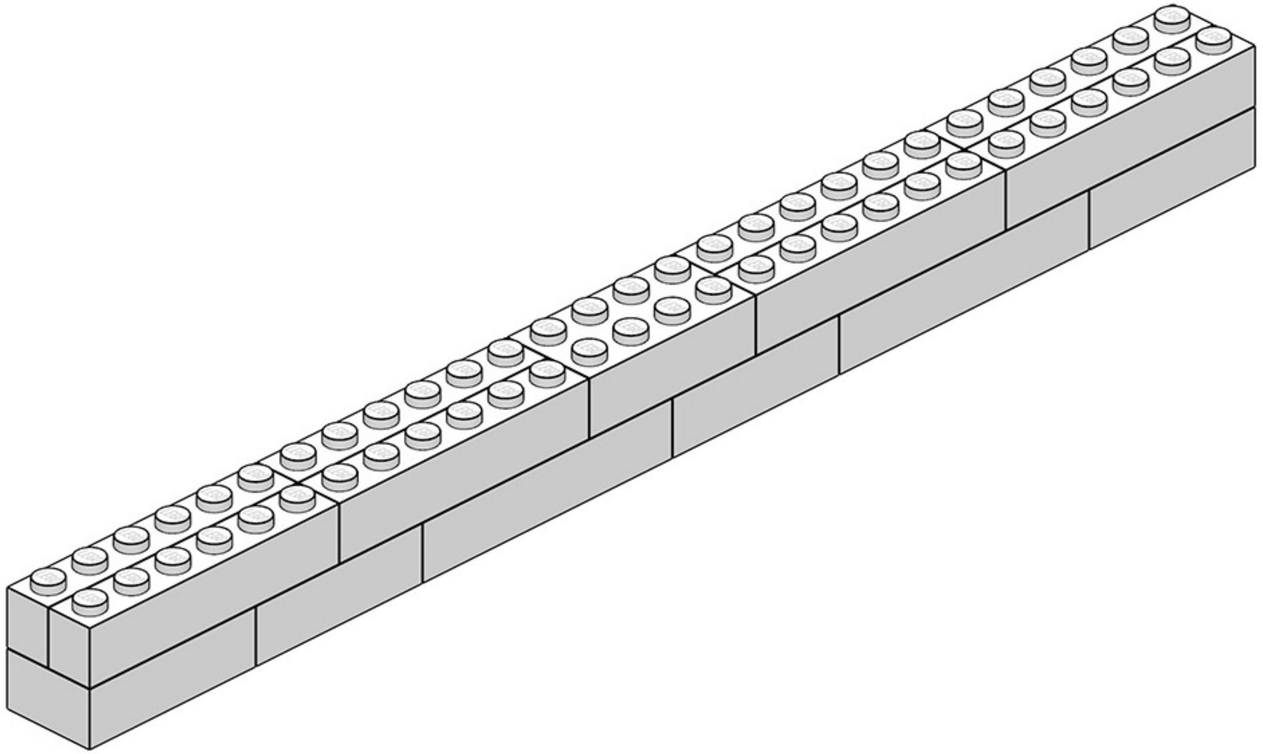
ROBORISE-IT!
ROBOTIC EDUCATION

9



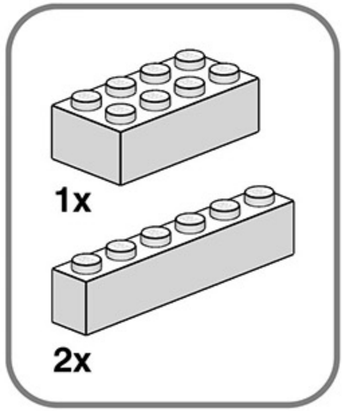
World Robot Olympiad and the WRO logo are trademarks of the World Robot Olympiad Association Ltd. © 2019 World Robot Olympiad Association Ltd.
LEGO, the LEGO logo, MINDSTORMS, the Brick and Knob configurations are trademarks of the LEGO Group. © 2019 The LEGO Group. All rights reserved.

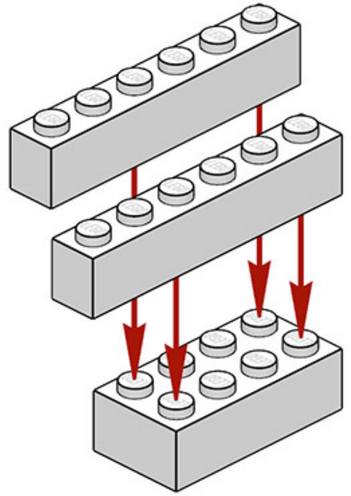
ROBORISE-IT!
ROBOTIC EDUCATION



World Robot Olympiad and the WRO logo are trademarks of the World Robot Olympiad Association Ltd. © 2019 World Robot Olympiad Association Ltd.
LEGO, the LEGO logo, MINDSTORMS, the Brick and Knob configurations are trademarks of the LEGO Group. © 2019 The LEGO Group. All rights reserved.

ROBORISE-IT!
ROBOTIC EDUCATION

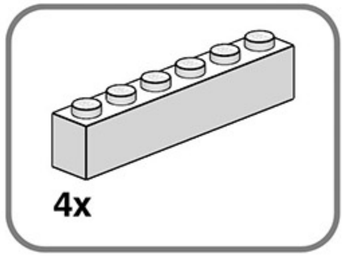




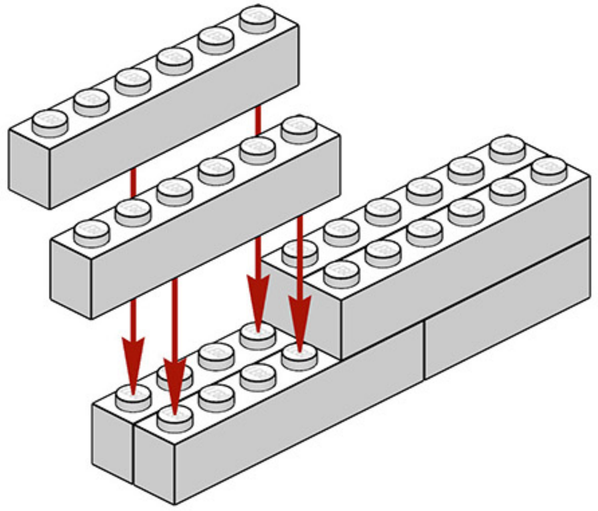
1

World Robot Olympiad and the WRO logo are trademarks of the World Robot Olympiad Association Ltd. © 2019 World Robot Olympiad Association Ltd.
LEGO, the LEGO logo, MINDSTORMS, the Brick and Knob configurations are trademarks of the LEGO Group. © 2019 The LEGO Group. All rights reserved.

ROBORISE-IT!
ROBOTIC EDUCATION

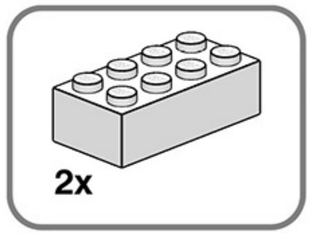


2

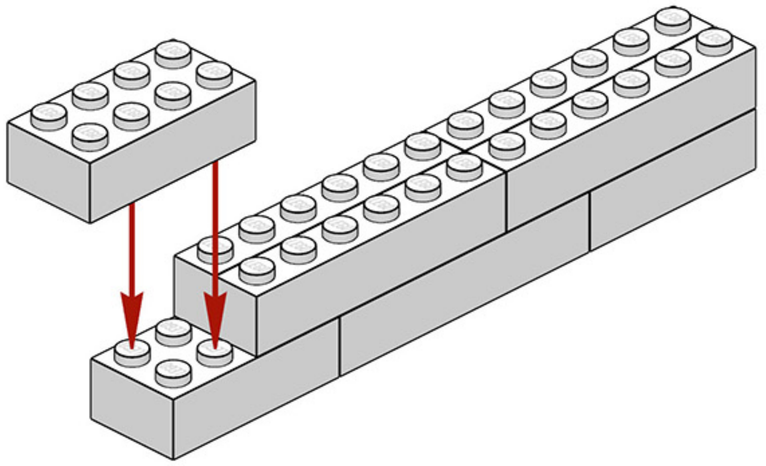


World Robot Olympiad and the WRO logo are trademarks of the World Robot Olympiad Association Ltd. © 2019 World Robot Olympiad Association Ltd.
LEGO, the LEGO logo, MINDSTORMS, the Brick and Knob configurations are trademarks of the LEGO Group. © 2019 The LEGO Group. All rights reserved.

ROBORISE-IT!
ROBOTIC EDUCATION

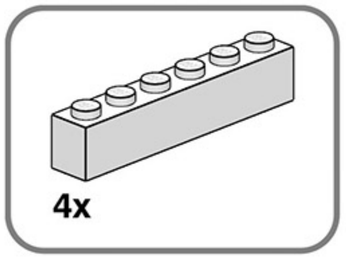


3

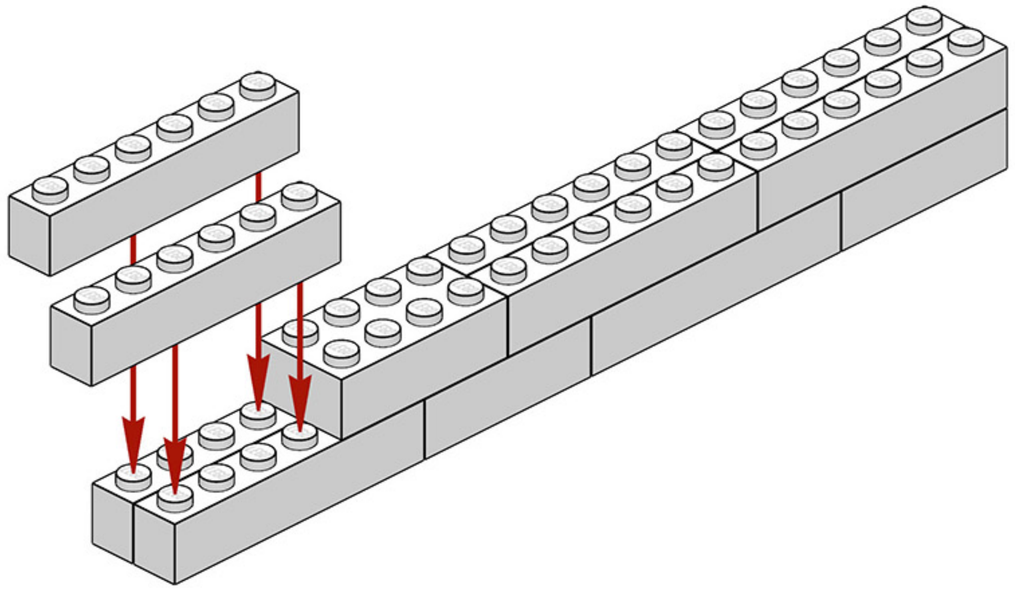


World Robot Olympiad and the WRO logo are trademarks of the World Robot Olympiad Association Ltd. © 2019 World Robot Olympiad Association Ltd.
LEGO, the LEGO logo, MINDSTORMS, the Brick and Knob configurations are trademarks of the LEGO Group. © 2019 The LEGO Group. All rights reserved.

ROBORISE-IT!
ROBOTIC EDUCATION

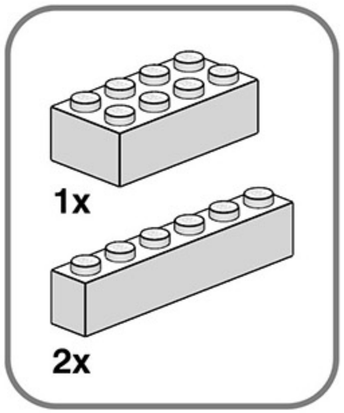


4

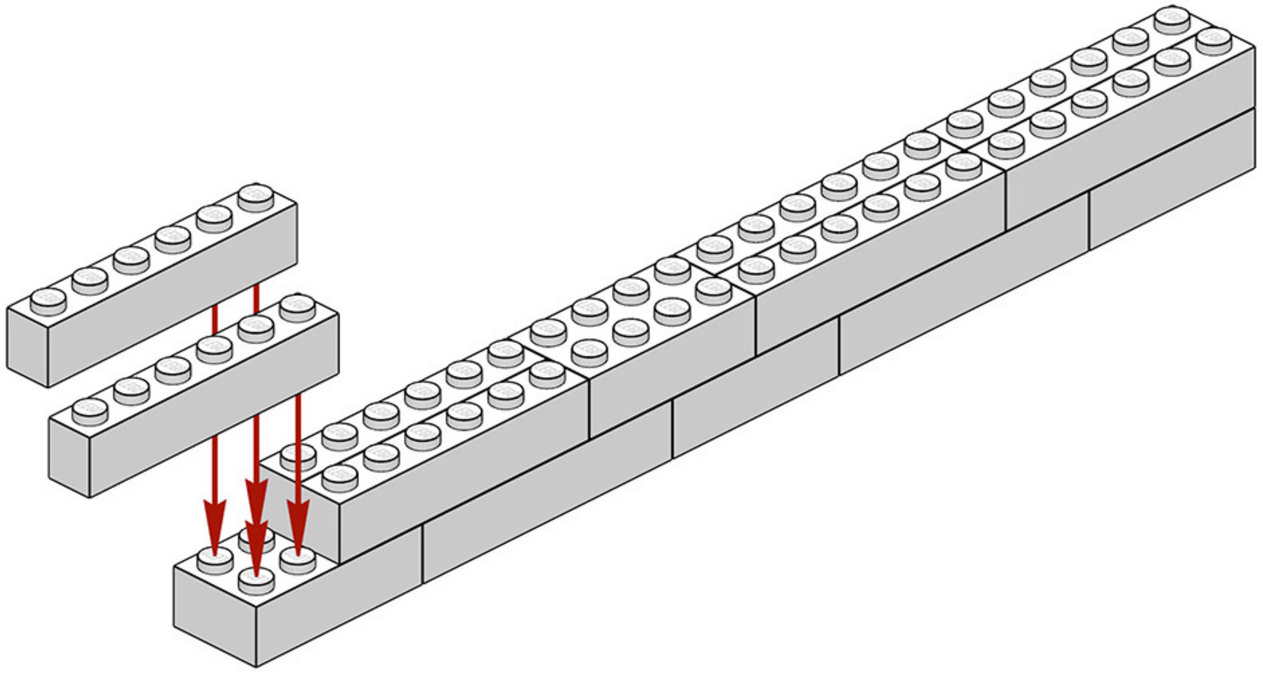


World Robot Olympiad and the WRO logo are trademarks of the World Robot Olympiad Association Ltd. © 2019 World Robot Olympiad Association Ltd.
LEGO, the LEGO logo, MINDSTORMS, the Brick and Knob configurations are trademarks of the LEGO Group. © 2019 The LEGO Group. All rights reserved.

ROBORISE-IT!
ROBOTIC EDUCATION

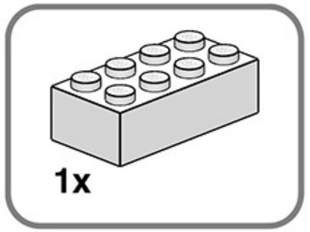


5

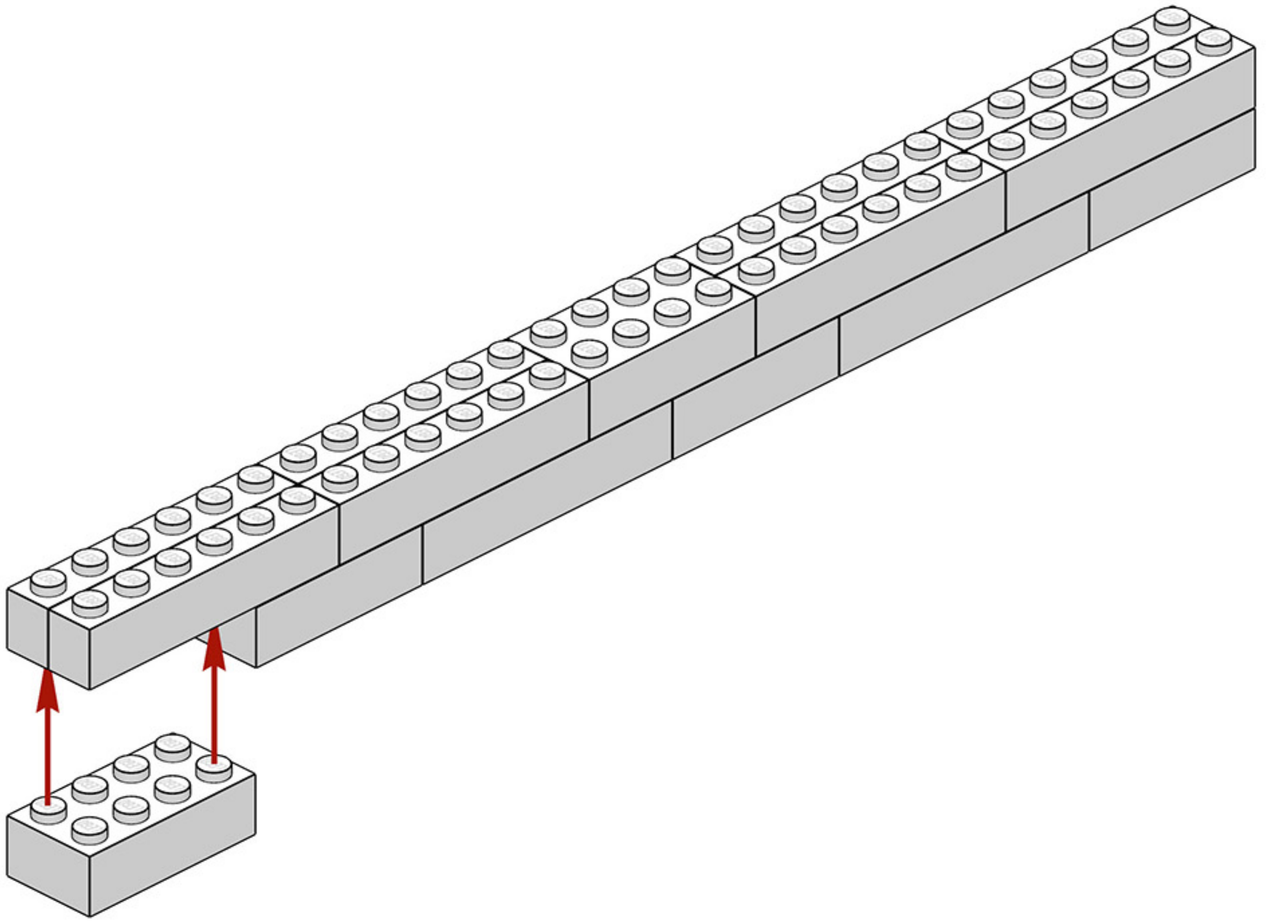


World Robot Olympiad and the WRO logo are trademarks of the World Robot Olympiad Association Ltd. © 2019 World Robot Olympiad Association Ltd.
LEGO, the LEGO logo, MINDSTORMS, the Brick and Knob configurations are trademarks of the LEGO Group. © 2019 The LEGO Group. All rights reserved.

ROBORISE-IT!
ROBOTIC EDUCATION



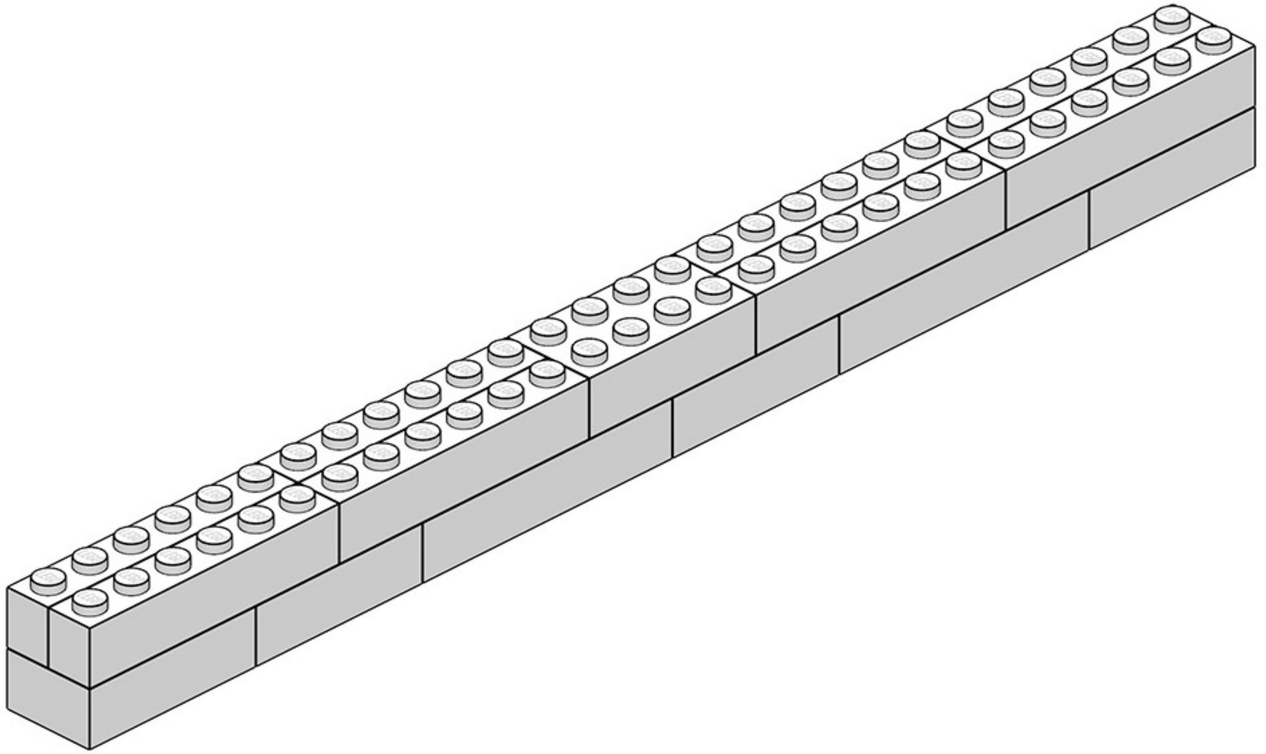
6



World Robot Olympiad and the WRO logo are trademarks of the World Robot Olympiad Association Ltd. © 2019 World Robot Olympiad Association Ltd.
LEGO, the LEGO logo, MINDSTORMS, the Brick and Knob configurations are trademarks of the LEGO Group. © 2019 The LEGO Group. All rights reserved.

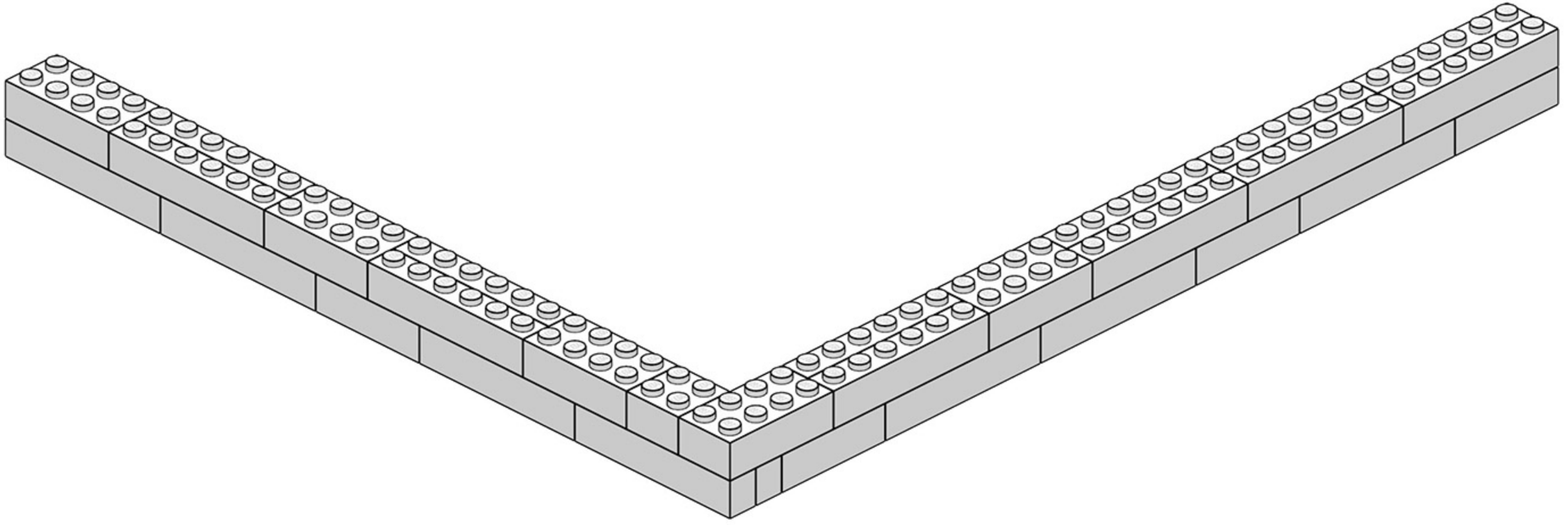
ROBORISE-IT!
ROBOTIC EDUCATION

7



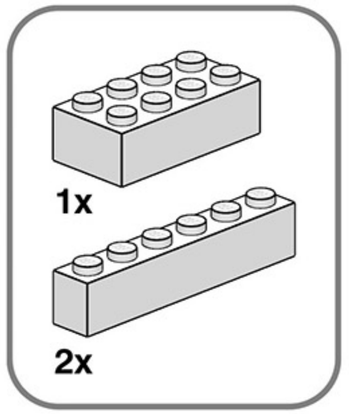
World Robot Olympiad and the WRO logo are trademarks of the World Robot Olympiad Association Ltd. © 2019 World Robot Olympiad Association Ltd.
LEGO, the LEGO logo, MINDSTORMS, the Brick and Knob configurations are trademarks of the LEGO Group. © 2019 The LEGO Group. All rights reserved.

ROBORISE-IT!
ROBOTIC EDUCATION

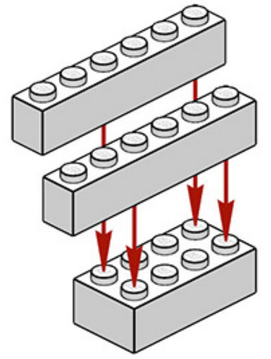


World Robot Olympiad and the WRO logo are trademarks of the World Robot Olympiad Association Ltd. © 2019 World Robot Olympiad Association Ltd.
LEGO, the LEGO logo, MINDSTORMS, the Brick and Knob configurations are trademarks of the LEGO Group. © 2019 The LEGO Group. All rights reserved.

ROBORISE-IT!
ROBOTIC EDUCATION

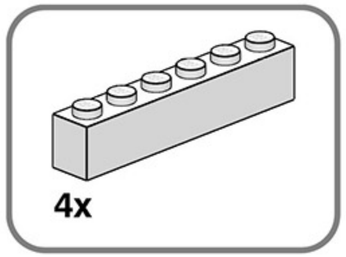


1

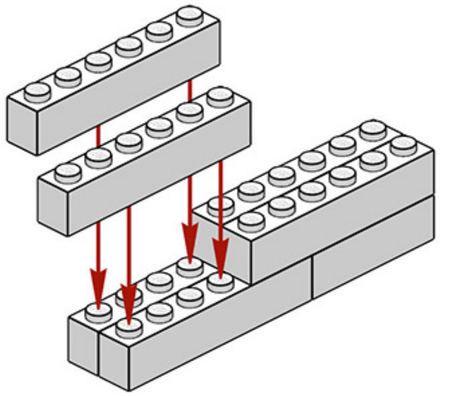


World Robot Olympiad and the WRO logo are trademarks of the World Robot Olympiad Association Ltd. © 2019 World Robot Olympiad Association Ltd.
LEGO, the LEGO logo, MINDSTORMS, the Brick and Knob configurations are trademarks of the LEGO Group. © 2019 The LEGO Group. All rights reserved.

ROBORISE-IT!
ROBOTIC EDUCATION

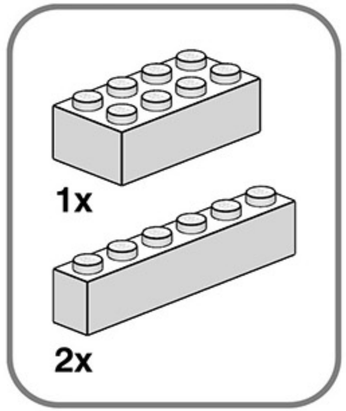


2

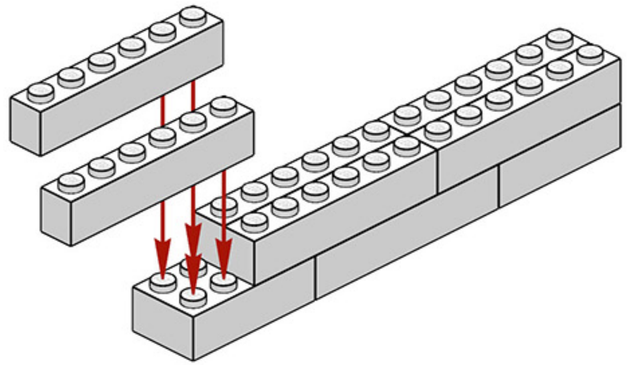


World Robot Olympiad and the WRO logo are trademarks of the World Robot Olympiad Association Ltd. © 2019 World Robot Olympiad Association Ltd.
LEGO, the LEGO logo, MINDSTORMS, the Brick and Knob configurations are trademarks of the LEGO Group. © 2019 The LEGO Group. All rights reserved.

ROBORISE-IT!
ROBOTIC EDUCATION

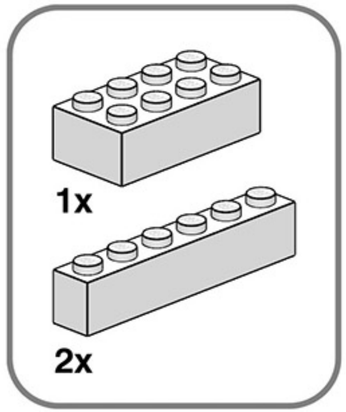


3

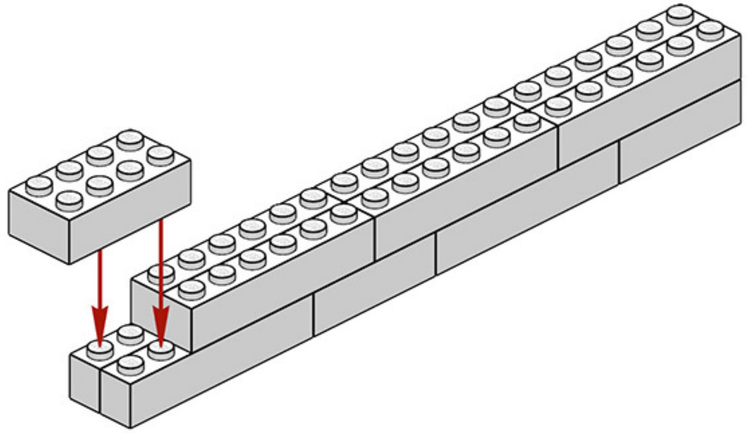


World Robot Olympiad and the WRO logo are trademarks of the World Robot Olympiad Association Ltd. © 2019 World Robot Olympiad Association Ltd.
LEGO, the LEGO logo, MINDSTORMS, the Brick and Knob configurations are trademarks of the LEGO Group. © 2019 The LEGO Group. All rights reserved.

ROBORISE-IT!
ROBOTIC EDUCATION

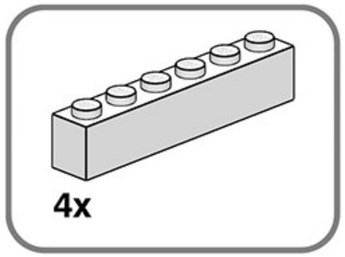


4

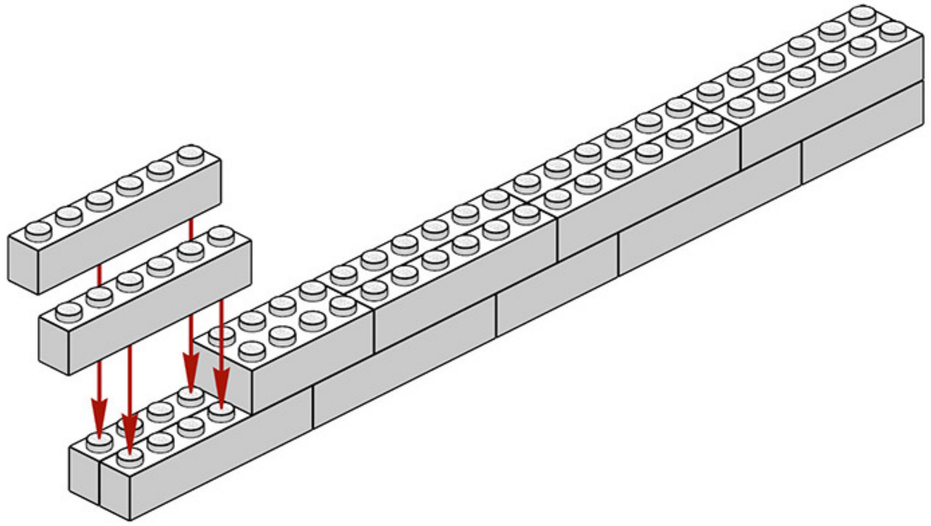


World Robot Olympiad and the WRO logo are trademarks of the World Robot Olympiad Association Ltd. © 2019 World Robot Olympiad Association Ltd.
LEGO, the LEGO logo, MINDSTORMS, the Brick and Knob configurations are trademarks of the LEGO Group. © 2019 The LEGO Group. All rights reserved.

ROBORISE-IT!
ROBOTIC EDUCATION

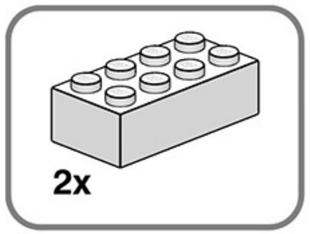


5

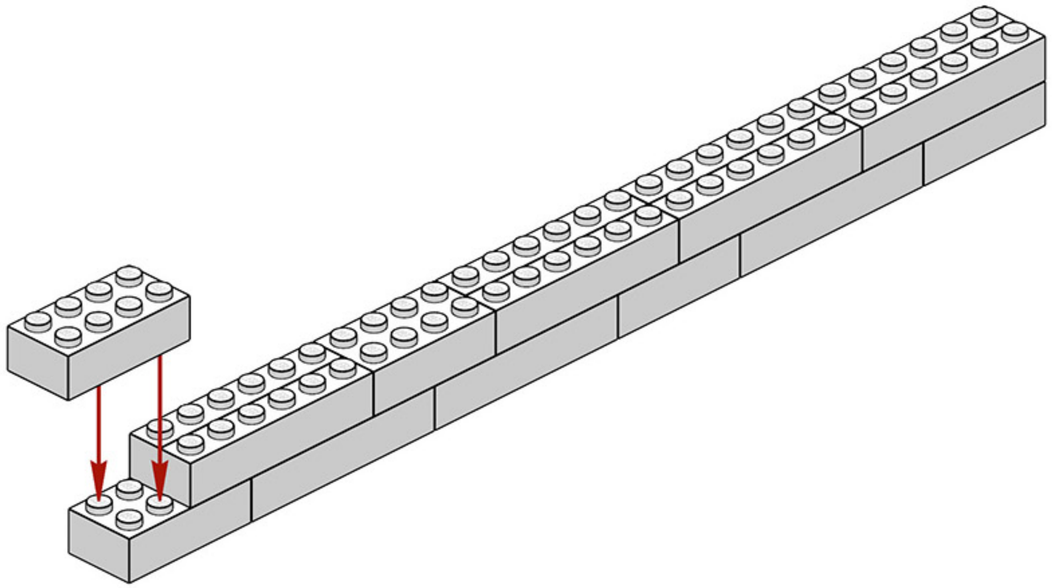


World Robot Olympiad and the WRO logo are trademarks of the World Robot Olympiad Association Ltd. © 2019 World Robot Olympiad Association Ltd.
LEGO, the LEGO logo, MINDSTORMS, the Brick and Knob configurations are trademarks of the LEGO Group. © 2019 The LEGO Group. All rights reserved.

ROBORISE-IT!
ROBOTIC EDUCATION

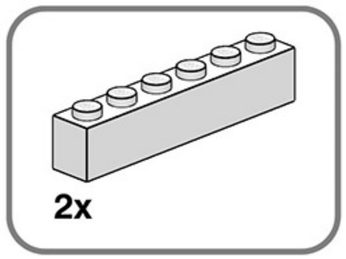


6

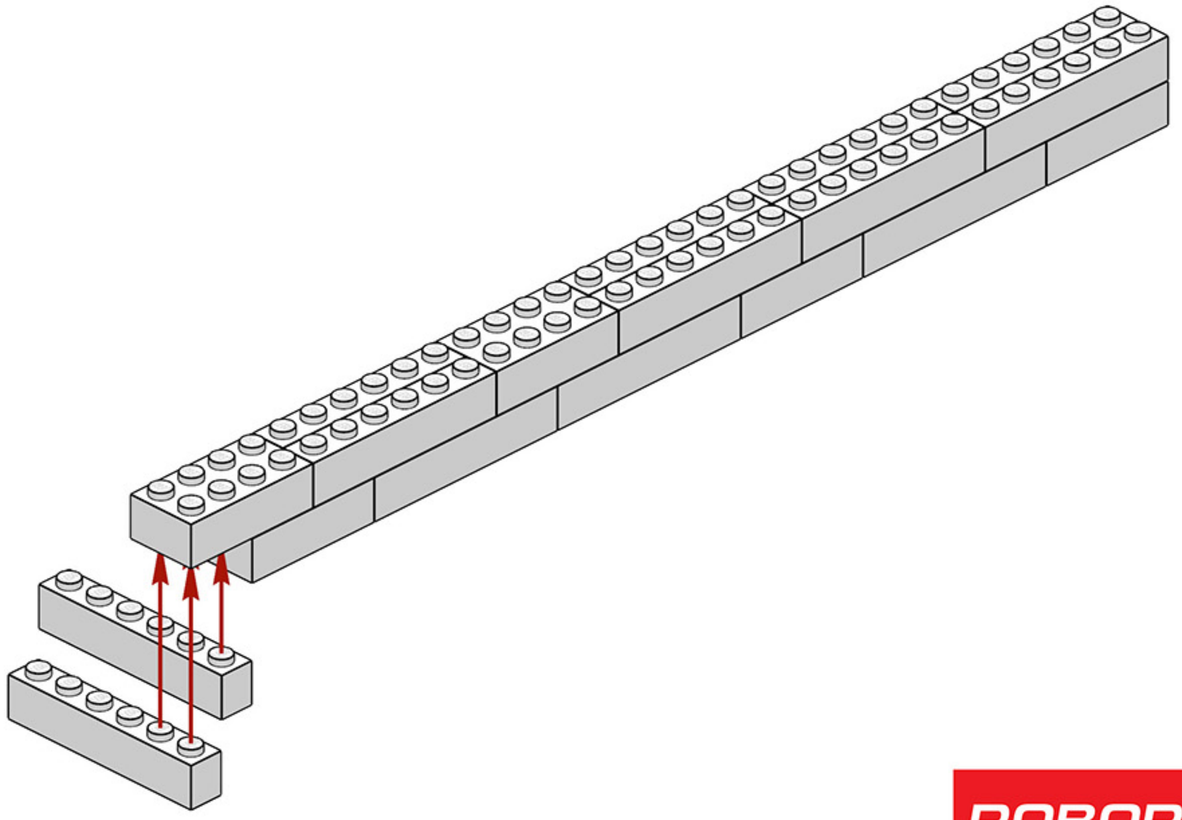


World Robot Olympiad and the WRO logo are trademarks of the World Robot Olympiad Association Ltd. © 2019 World Robot Olympiad Association Ltd.
LEGO, the LEGO logo, MINDSTORMS, the Brick and Knob configurations are trademarks of the LEGO Group. © 2019 The LEGO Group. All rights reserved.

ROBORISE-IT!
ROBOTIC EDUCATION

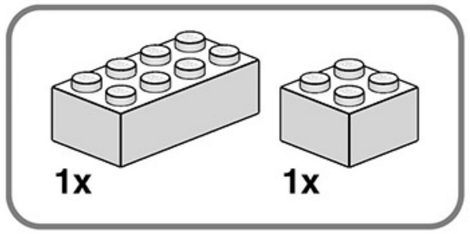


7

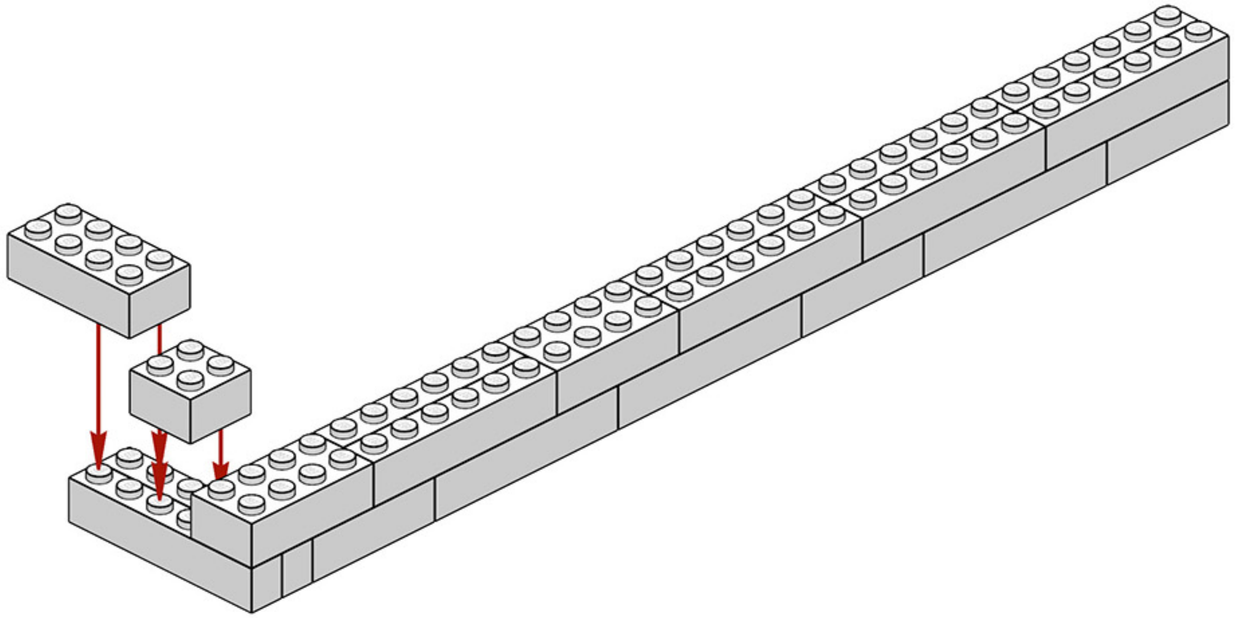


World Robot Olympiad and the WRO logo are trademarks of the World Robot Olympiad Association Ltd. © 2019 World Robot Olympiad Association Ltd.
LEGO, the LEGO logo, MINDSTORMS, the Brick and Knob configurations are trademarks of the LEGO Group. © 2019 The LEGO Group. All rights reserved.

ROBORISE-IT!
ROBOTIC EDUCATION

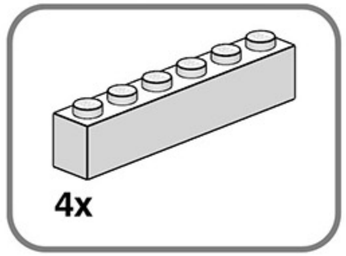


8

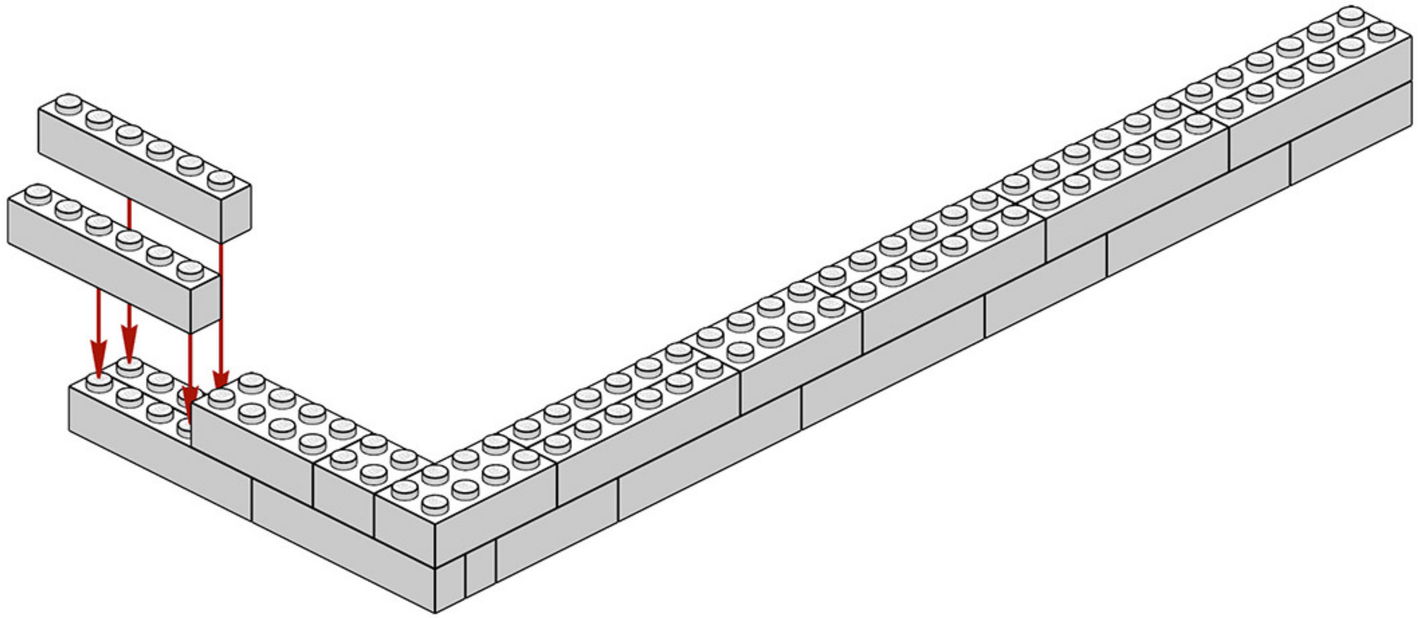


World Robot Olympiad and the WRO logo are trademarks of the World Robot Olympiad Association Ltd. © 2019 World Robot Olympiad Association Ltd.
LEGO, the LEGO logo, MINDSTORMS, the Brick and Knob configurations are trademarks of the LEGO Group. © 2019 The LEGO Group. All rights reserved.

ROBORISE-IT!
ROBOTIC EDUCATION

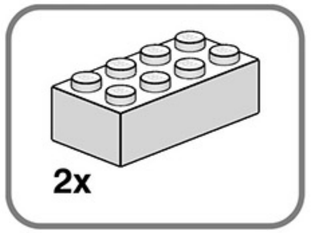


9

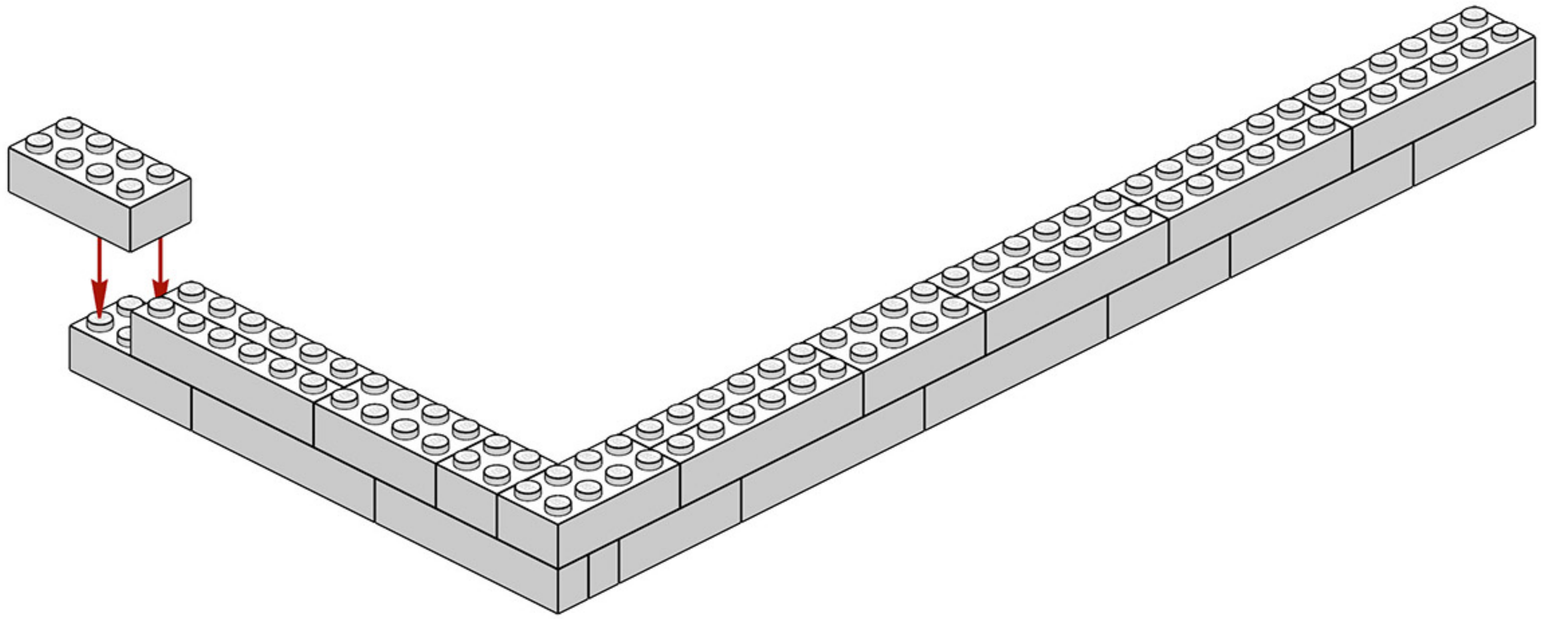


World Robot Olympiad and the WRO logo are trademarks of the World Robot Olympiad Association Ltd. © 2019 World Robot Olympiad Association Ltd.
LEGO, the LEGO logo, MINDSTORMS, the Brick and Knob configurations are trademarks of the LEGO Group. © 2019 The LEGO Group. All rights reserved.

ROBORISE-IT!
ROBOTIC EDUCATION

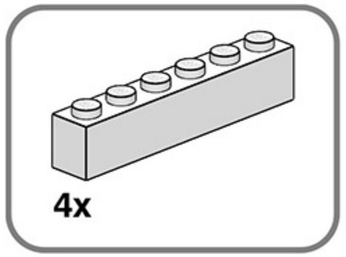


10

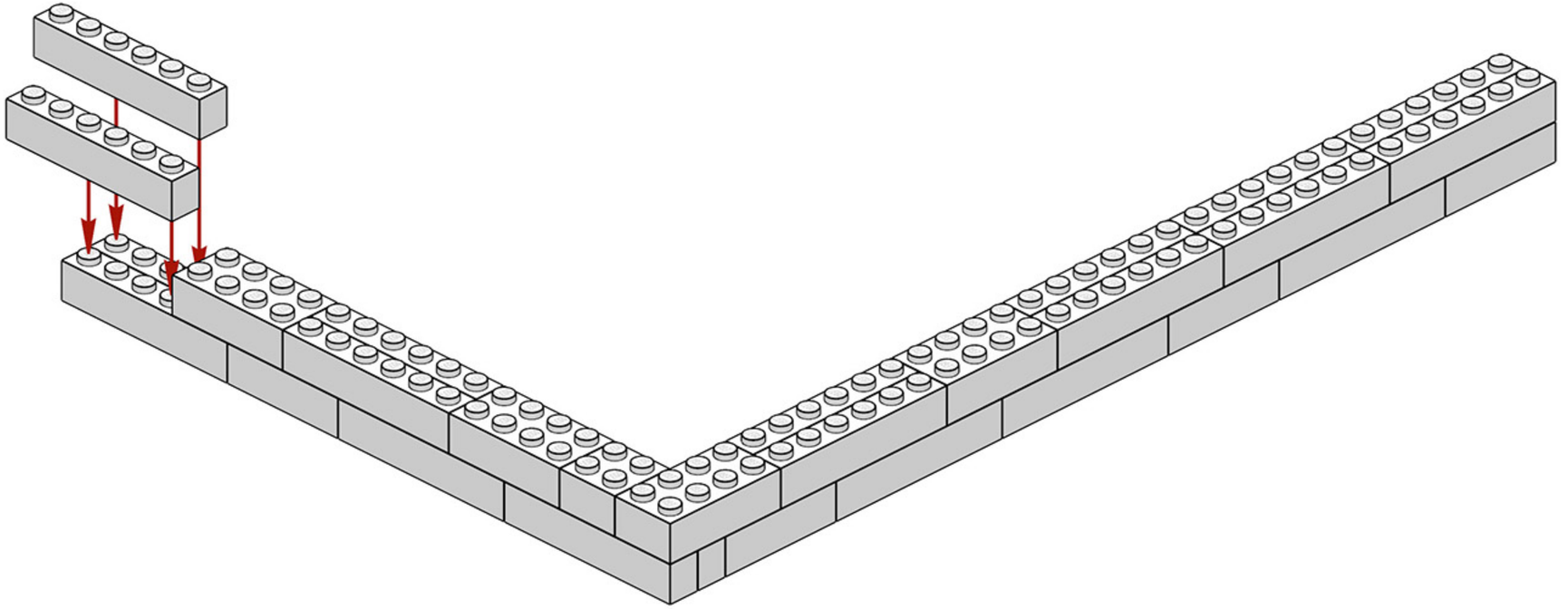


World Robot Olympiad and the WRO logo are trademarks of the World Robot Olympiad Association Ltd. © 2019 World Robot Olympiad Association Ltd.
LEGO, the LEGO logo, MINDSTORMS, the Brick and Knob configurations are trademarks of the LEGO Group. © 2019 The LEGO Group. All rights reserved.

ROBORISE-IT!
ROBOTIC EDUCATION

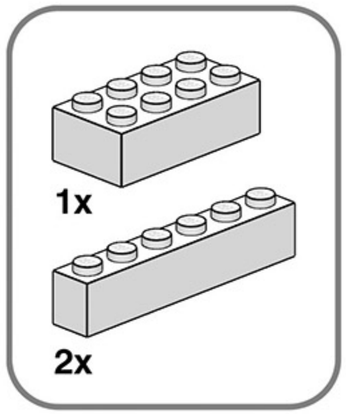


11

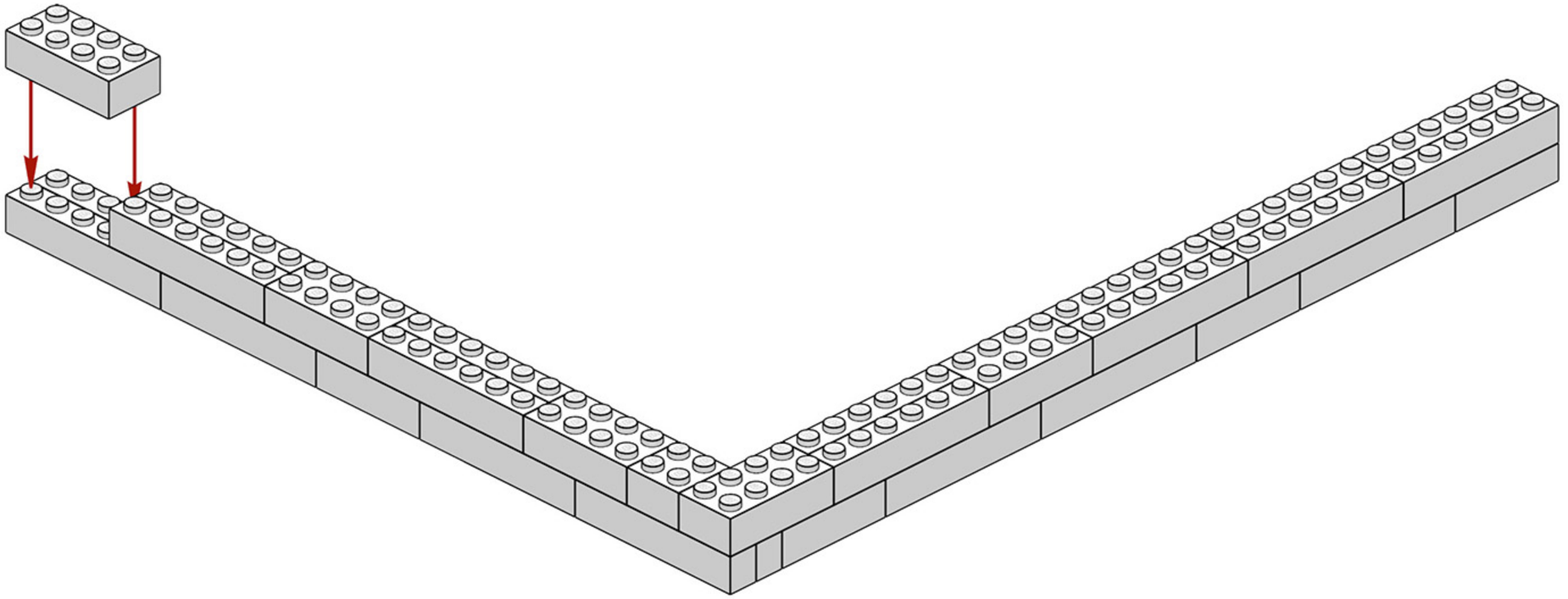


World Robot Olympiad and the WRO logo are trademarks of the World Robot Olympiad Association Ltd. © 2019 World Robot Olympiad Association Ltd.
LEGO, the LEGO logo, MINDSTORMS, the Brick and Knob configurations are trademarks of the LEGO Group. © 2019 The LEGO Group. All rights reserved.

ROBORISE-IT!
ROBOTIC EDUCATION



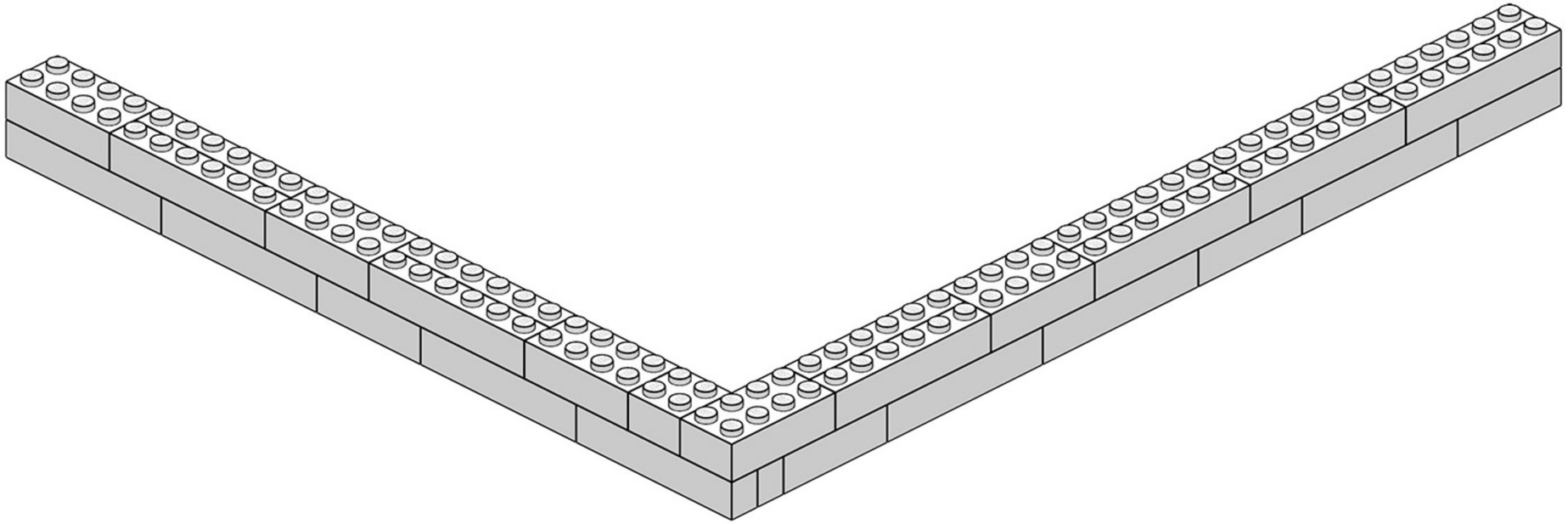
12



World Robot Olympiad and the WRO logo are trademarks of the World Robot Olympiad Association Ltd. © 2019 World Robot Olympiad Association Ltd.
LEGO, the LEGO logo, MINDSTORMS, the Brick and Knob configurations are trademarks of the LEGO Group. © 2019 The LEGO Group. All rights reserved.

ROBORISE-IT!
ROBOTIC EDUCATION

13



World Robot Olympiad and the WRO logo are trademarks of the World Robot Olympiad Association Ltd. © 2019 World Robot Olympiad Association Ltd.
LEGO, the LEGO logo, MINDSTORMS, the Brick and Knob configurations are trademarks of the LEGO Group. © 2019 The LEGO Group. All rights reserved.

ROBORISE-IT!
ROBOTIC EDUCATION