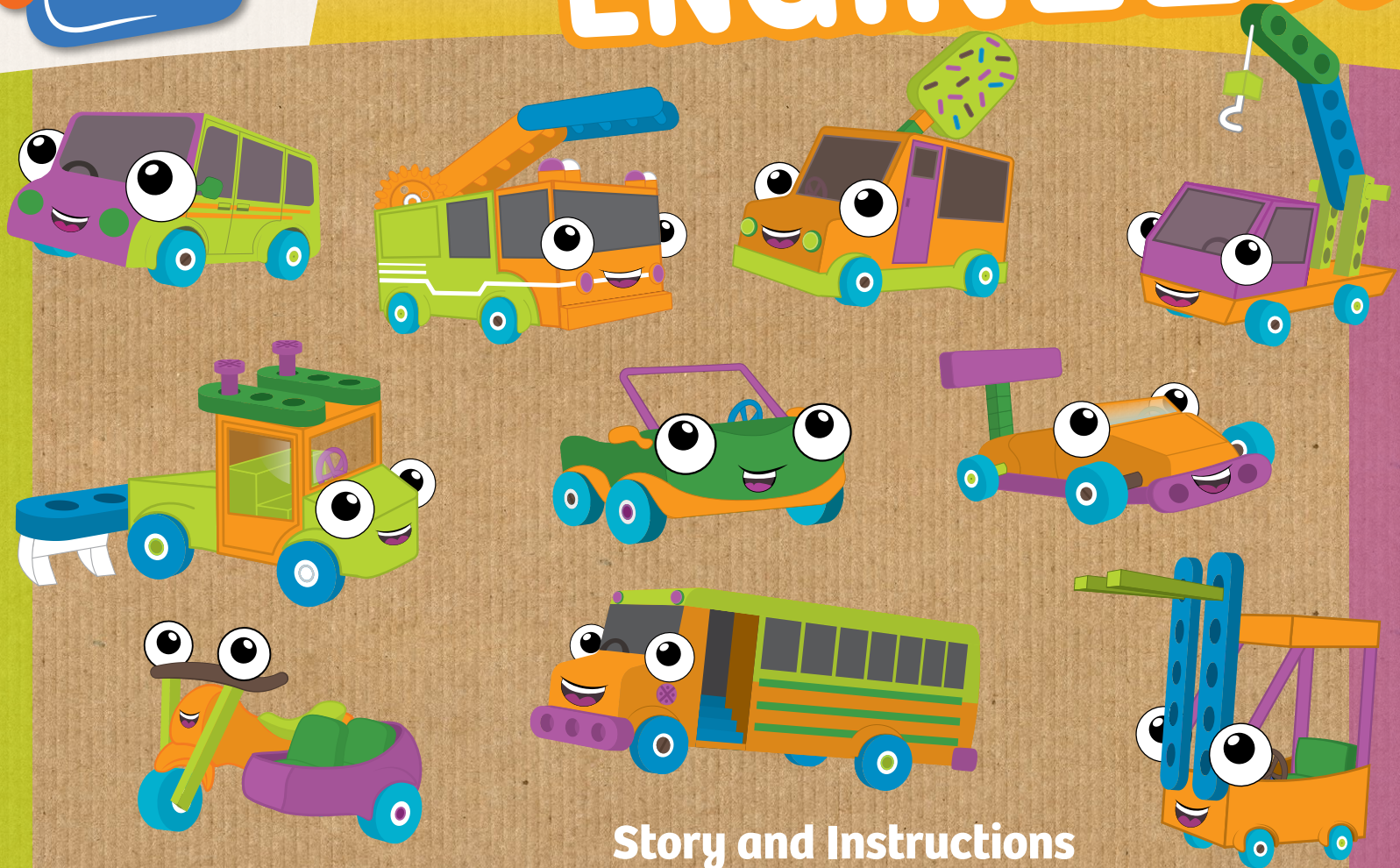




# AUTOMOBILE ENGINEER



THAMES & KOSMOS

Story and Instructions

## >>> IMPORTANT INFORMATION

### Dear Parents,

Engineering is an extremely exciting and vast field. This kit, along with its illustrated storybook and instruction manual, provides an engaging way to teach simple engineering concepts to preschool-age kids.

Read the story with your child and build the simple models of the vehicles the main characters encounter on their humorous trip to the supermarket. Along this roundabout journey, the characters build various vehicles to solve problems and complete tasks. As you follow the story, your child can build models of the ten vehicles in the story with your help. Large, colorful plastic building pieces make it easy for small hands to put the models together.

The models are assembled step by step using a construction system. It will require a little practice and patience at first. Please assist your children when they need your help, but also let them try to build the models by themselves. Your children will be happy to have your help with the models or assembly steps that pose particular difficulties.

**We wish you and your child lots of fun building, discovering, and learning!**

### Safety Information



#### WARNING:

**CHOKING HAZARD** — Small parts.  
Not for children under 3 yrs.

- >>> **WARNING.** Not suitable for children under 3 years. Choking hazard — small parts may be swallowed or inhaled.
- >>> Keep the packaging and instructions as they contain important information.
- >>> Store the experiment material and assembled models out of the reach of small children.

# AUTOMOBILE ENGINEER

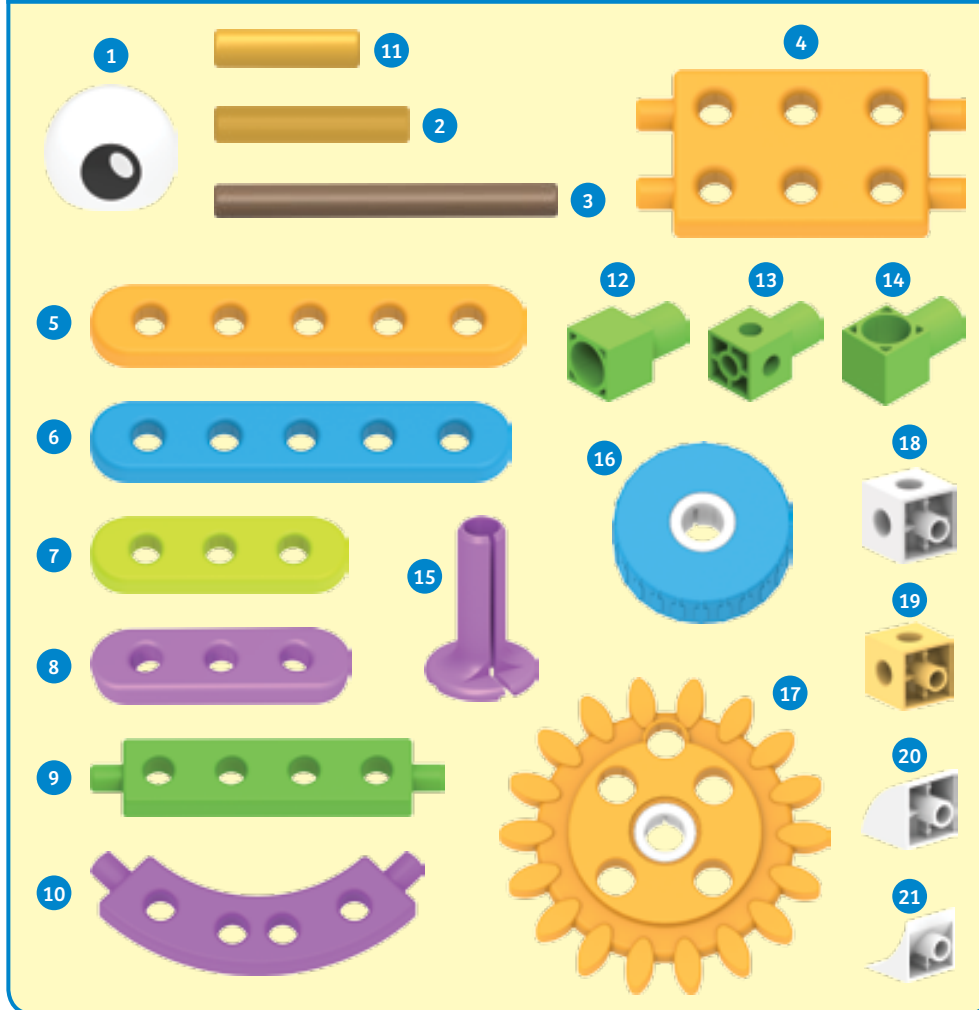


**Story by  
Ted McGuire**

**Illustrations by  
Dan Freitas and Ashley Greenleaf**

## >>> KIT CONTENTS

### What's inside your kit:



### Checklist: Find – Inspect – Check off

✓	No.	Description	Qty.	Item No.
<input type="radio"/>	1	Eye	2	7261-W85-A
<input type="radio"/>	2	Medium dowel	2	7330-W11-A1T
<input type="radio"/>	3	Long dowel	4	7330-W11-B1D
<input type="radio"/>	4	6-hole panel	2	7330-W11-C1O
<input type="radio"/>	5	5-hole rod, orange	2	7330-W11-D1O1
<input type="radio"/>	6	5-hole rod, blue	1	7330-W11-D1B1
<input type="radio"/>	7	3-hole rod, green	2	7330-W11-E1G
<input type="radio"/>	8	3-hole rod, purple	1	7330-W11-E1P1
<input type="radio"/>	9	4-hole rod, green	2	7330-W11-H1G1
<input type="radio"/>	10	4-hole curved rod	2	7330-W11-J1P1
<input type="radio"/>	11	Short dowel	4	7330-W11-X1T
<input type="radio"/>	12	Dowel block with top hole	5	7331-W10-D1G1
<input type="radio"/>	13	Cube block with peg	2	7331-W10-D3G1
<input type="radio"/>	14	Dowel block with side hole	12	7331-W10-M1G1
<input type="radio"/>	15	Nail	2	8036-W10-T1P
<input type="radio"/>	16	Wheel	4	8036-W85-I1B1
<input type="radio"/>	17	Jumbo gear	1	8060-W85-A1O
<input type="radio"/>	18	Cube block, white	11	880-W10-A1W
<input type="radio"/>	19	Cube block, peach	1	880-W10-A1PO
<input type="radio"/>	20	Convex block, white	4	880-W10-R1W
<input type="radio"/>	21	Concave block, white	4	880-W10-D1W

#### GOOD TO KNOW!

If you are missing any parts, please contact Thames & Kosmos customer service.



## Meet the Omega Family!

Ty and Karlie Omega are siblings. They live in a small city called Makersville. Ty and Karlie's dad is a writer. He writes science fiction stories. Their mom is a mechanical engineer. She designs big machines used in factories.

They live in an awesome warehouse filled with tools, equipment, and building materials. There are always a number of projects going on in the warehouse.

Ty loves figuring out how things work. Karlie loves building things.

When Ty and Karlie were little, Ms. O designed Huxley, a robot that can build just about anything. For one of his first projects Huxley converted Karlie's teddy bear, Remus, into a walking, talking science bear. Now Huxley and Remus are like members of the Omega family.

## Ty and Karlie's Automobile Engineering Adventure begins ...



One day, Ty and Karlie were building a pulley system to bring their ro-bear, Remus, up and down from the balcony.

"Hey kids," Mr. O yelled from downstairs, "I need some things from the supermarket to make dinner before Mom gets home! Can you go with Huxley and pick up them up?"

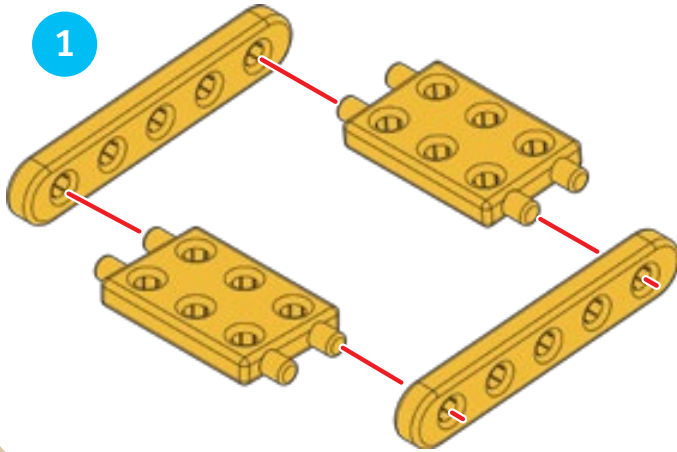
"Okay! Let's go!" said Ty. "But how are we going to get there?"

Karlie thought for a minute. "Let's build an automobile! Huxley, can you build us a minivan?"

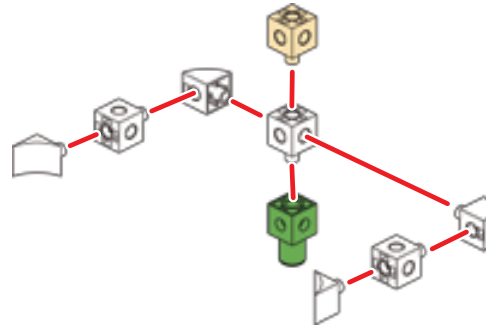
"Sure thing!" And with that, Huxley got to work.

MINNIE THE MINIVAN

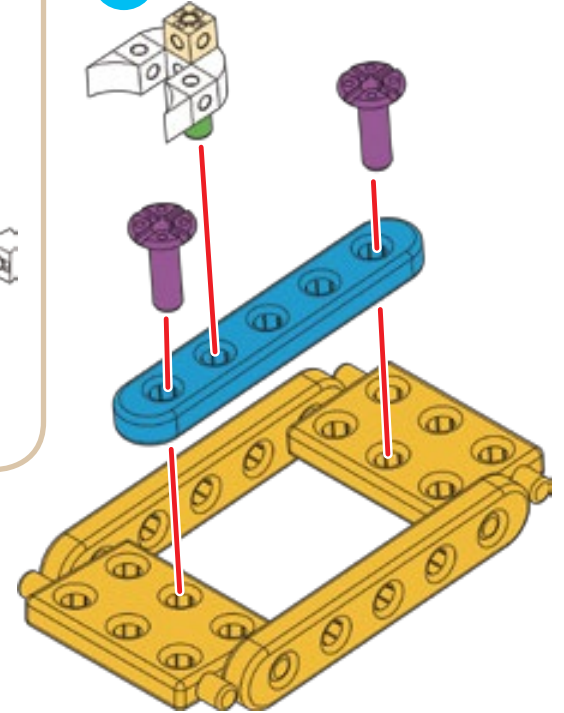
1



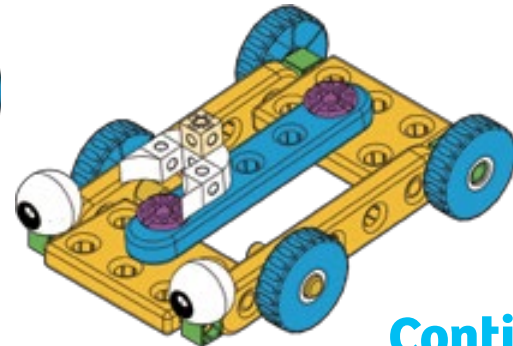
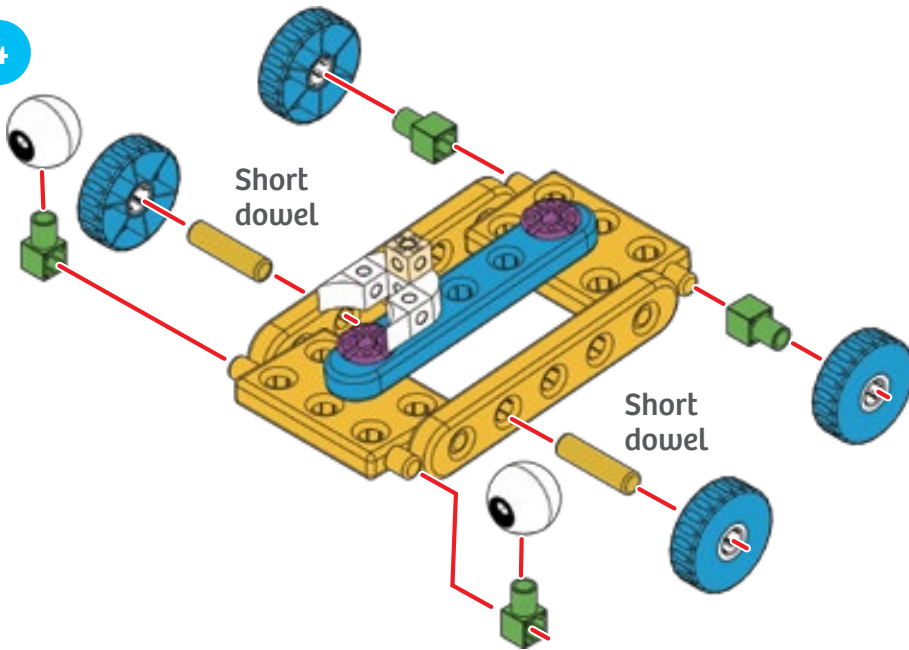
2



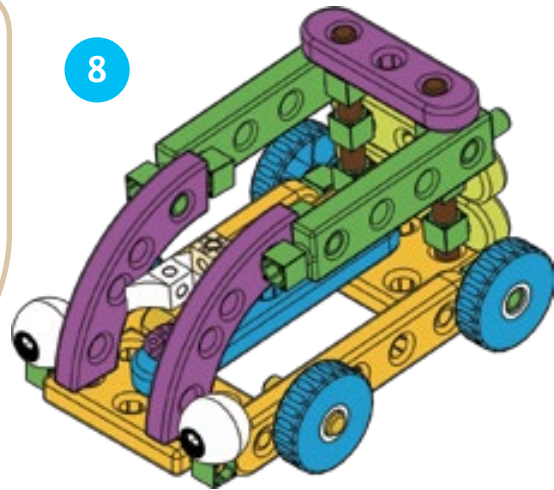
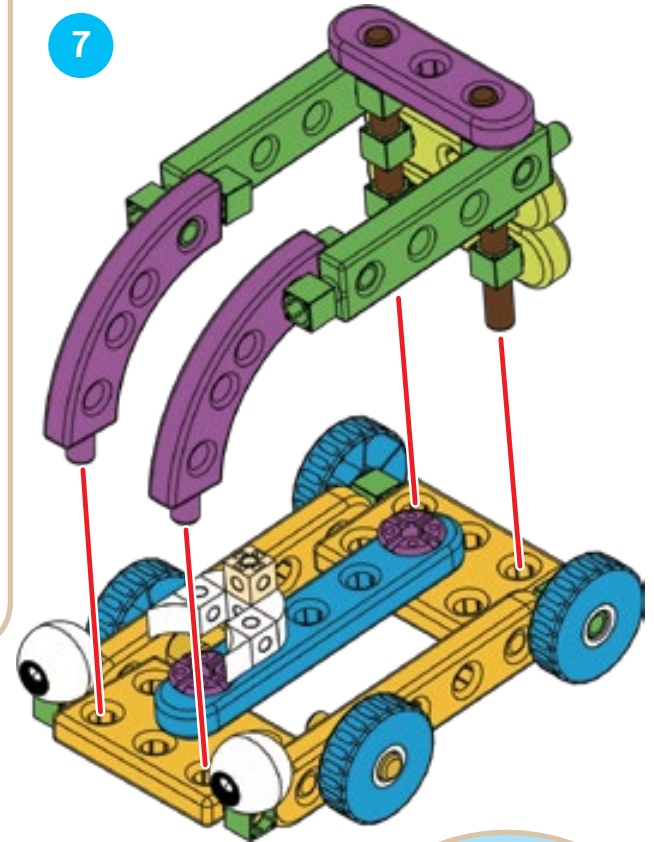
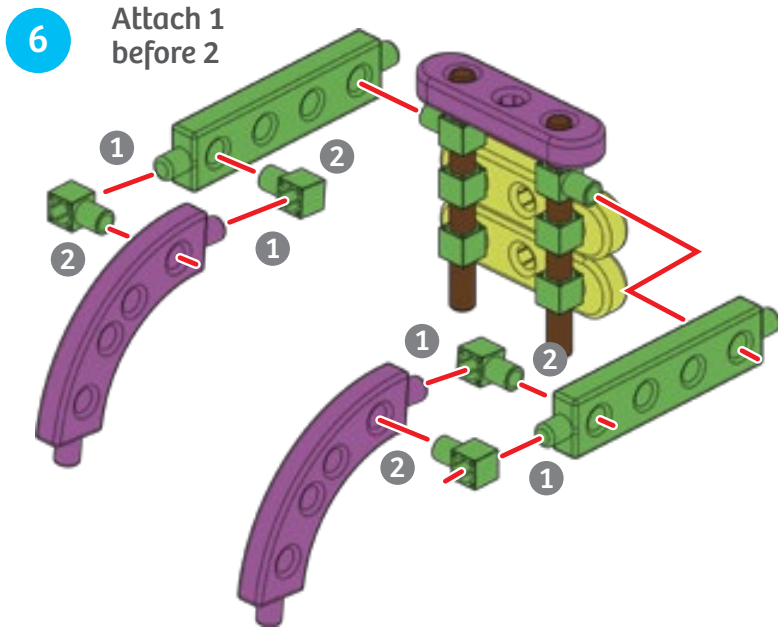
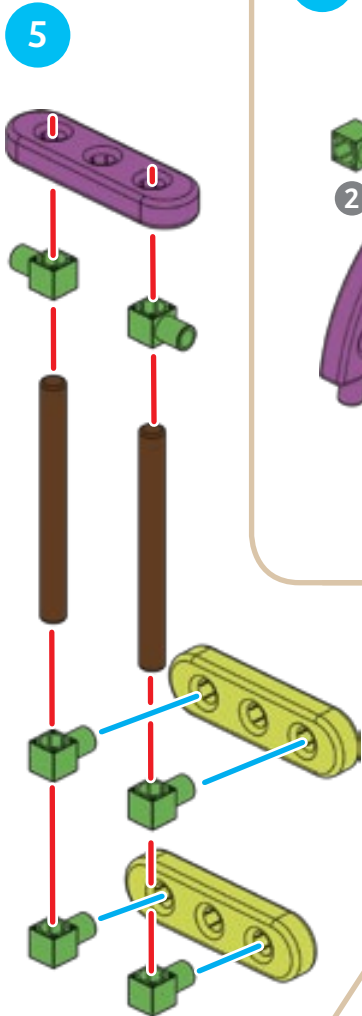
3



4



Continued >>>



**Done!**

"Hop in kids!" said Minnie the Minivan. "My wheels will allow us to roll to the market."

The kids and Huxley climbed into the minivan and off they went to the store.





On their way to the store, they passed by a construction site. They saw Mr. Steele, the building engineer.

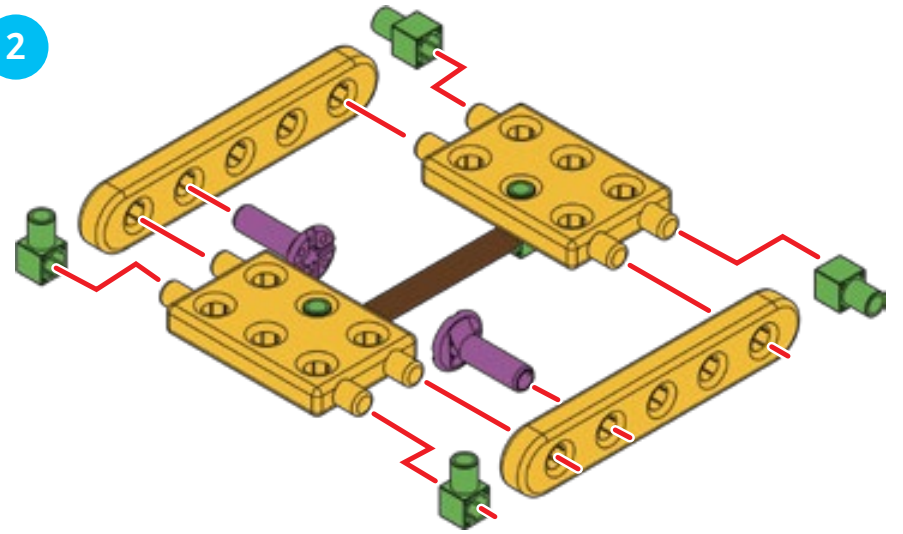
“Hello there kids! I’m glad I saw you. We have all these beams that need to get to the top of the structure. Can you help?”

“I can build a crane to lift the beams up there. Huxley, can you give me a hand?” Karlie said. Huxley and Karlie proceeded to assemble a crane truck.

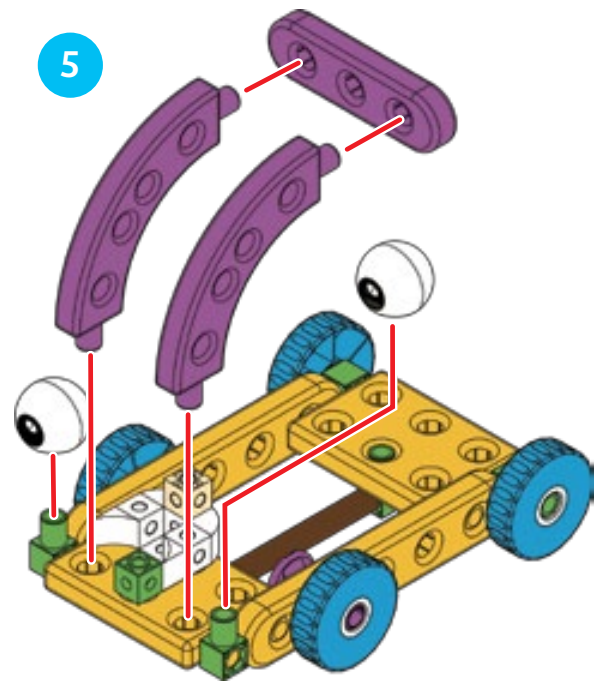


## CORY THE CRANE TRUCK

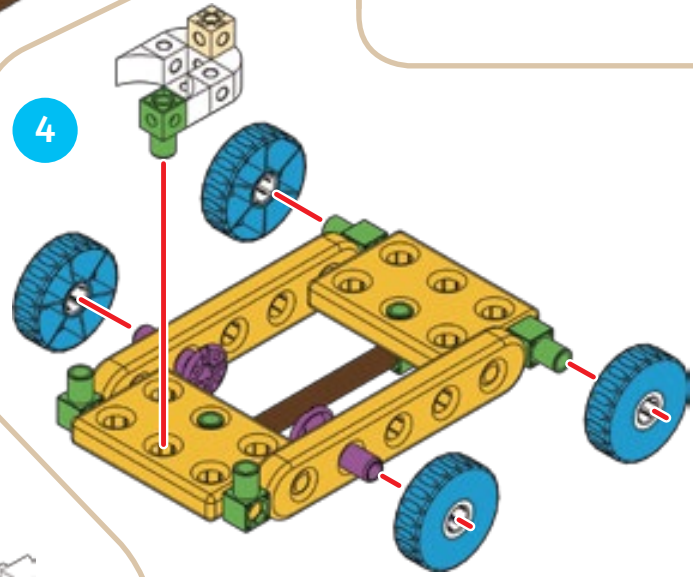
2



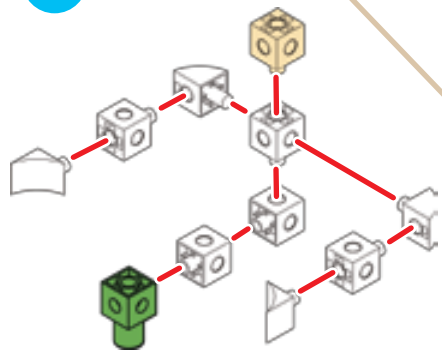
5

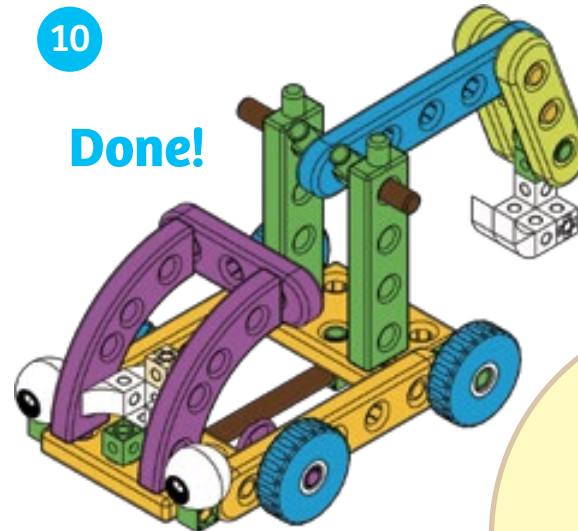
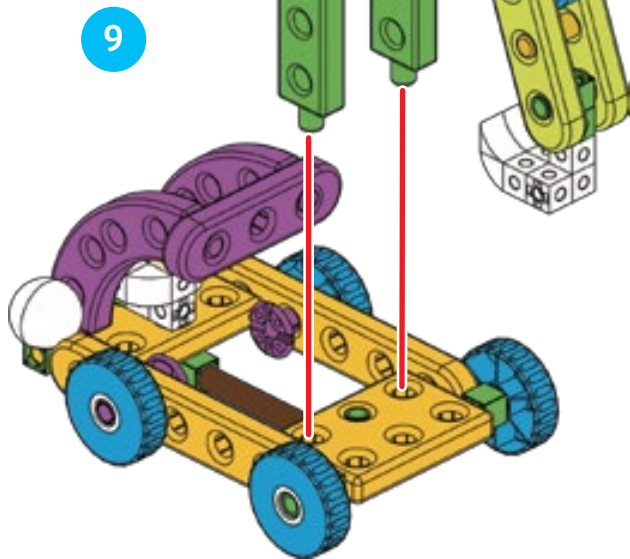
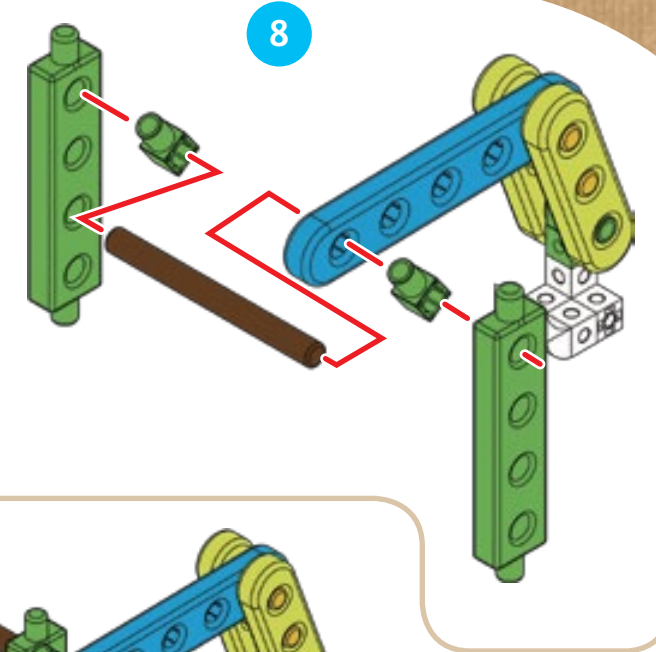
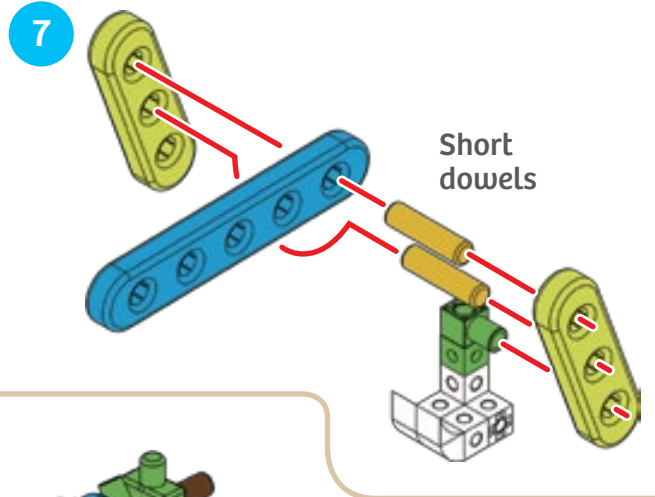
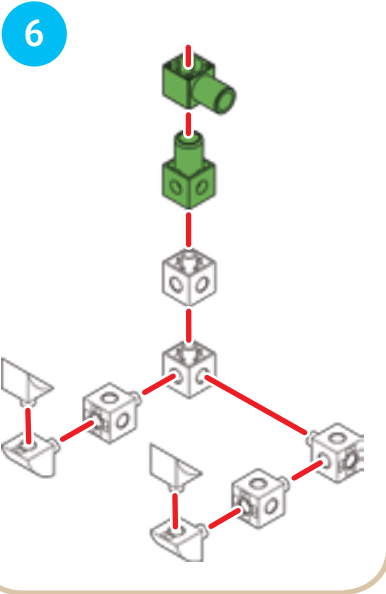


4



3





"Cory the Crane Truck, at your service," said Cory. "Looks like we've got a big job to do!"





“My mast and pulleys allow me to lift these heavy beams,” said Cory. He lifted the beams, one at a time, to the top of the large steel framework.

“Thank you!” exclaimed Mr. Steele. “Great work.”

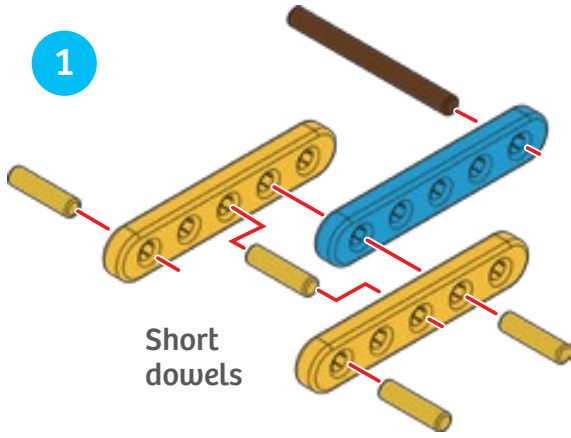
“You’re welcome,” said Karlie, “but we have to be going because we need to get to the market and back home before dinner.”

“Don’t worry, I’ll build a fast race car to get us to the store in no time!” declared Ty.

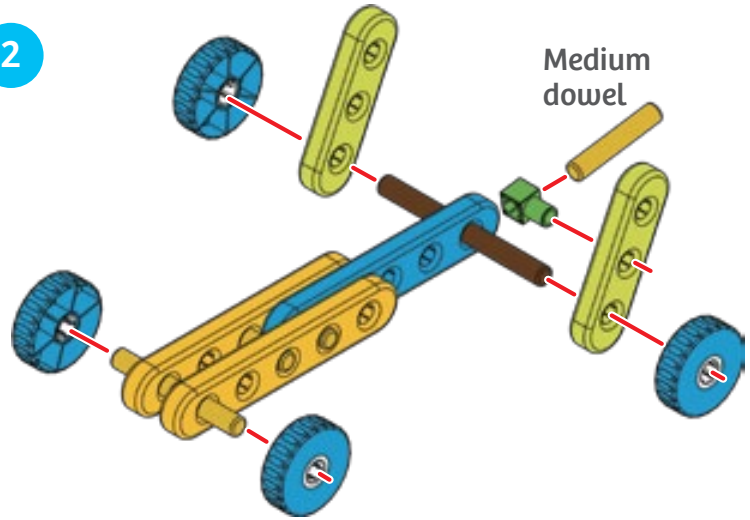
“Huxley, I’ll need some wheels, some rods, some axles, and ...” and with that they started assembling the race car.

RODNEY THE RACE CAR

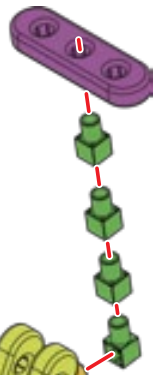
1



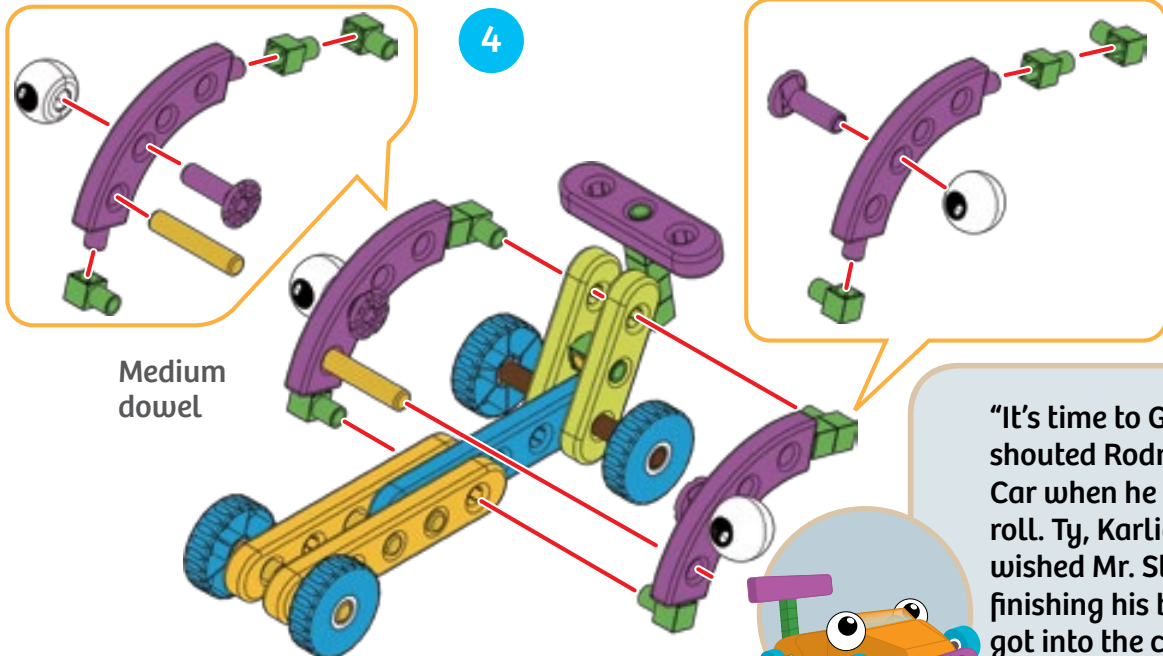
2



3



4



5



"It's time to G-g-g-gooooo!" shouted Rodney the Race Car when he was ready to roll. Ty, Karlie, and Huxley wished Mr. Steele luck finishing his building and got into the car.

Done!



They sped through town. Rodney was determined to get them to the supermarket quickly. His powerful engine made the wheels turn very fast.

“Whoa! Look over there!” shouted Ty. They all looked where Ty was pointing and saw Patty’s Pet Store had smoke billowing out of its windows.

“There must be a fire. We have to help!” said Karlie.

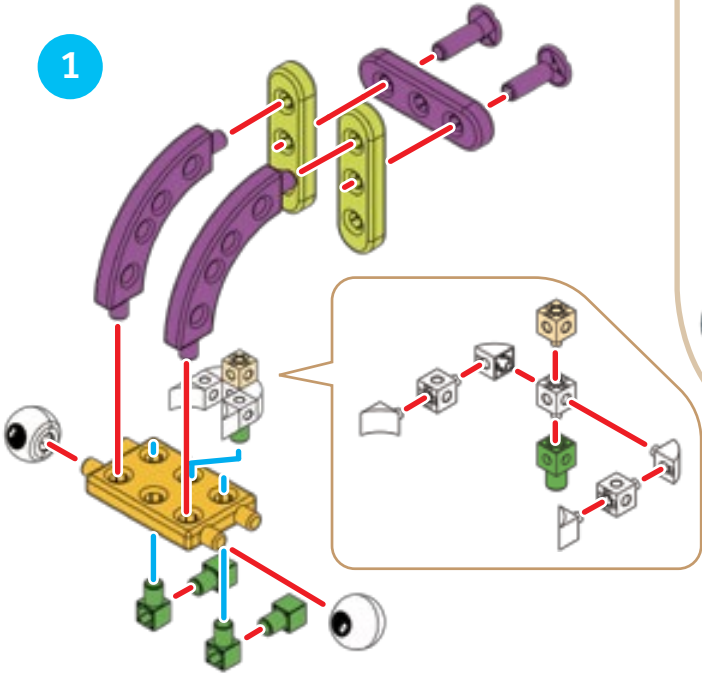
“Huxley, can you help us build a fire truck?”

“One fire truck coming up!” said Huxley.

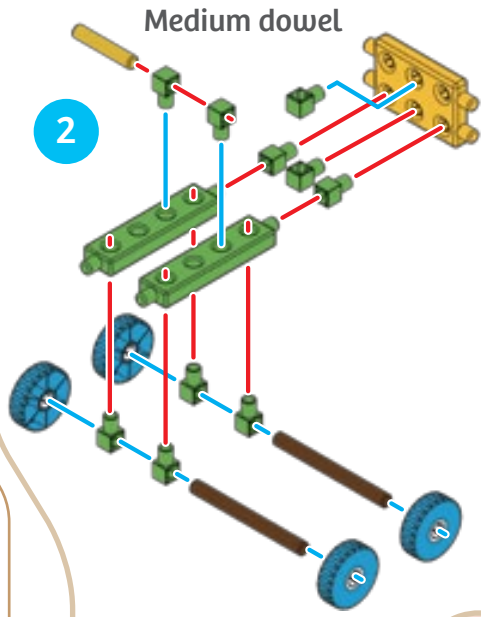


# FRANCINE THE FIRE TRUCK

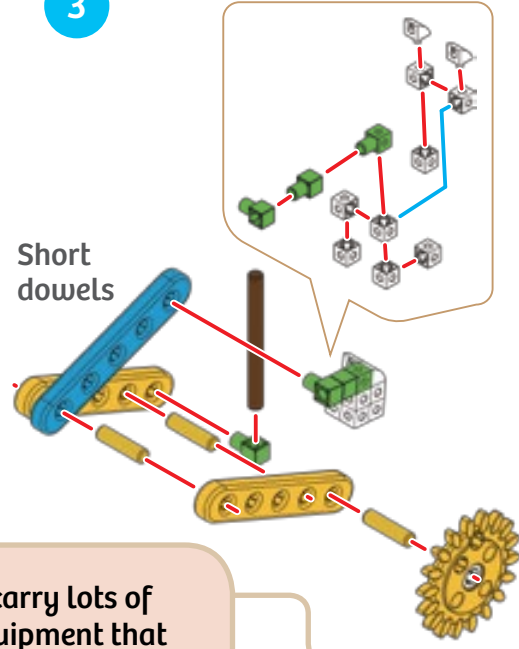
1



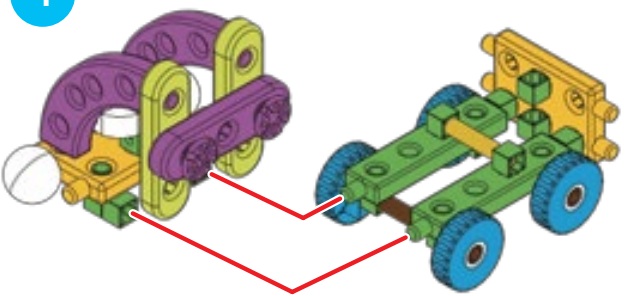
2



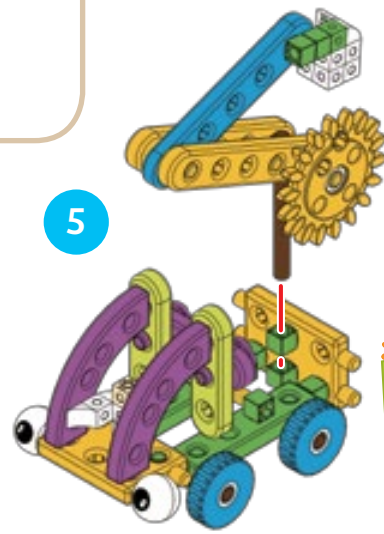
3



4



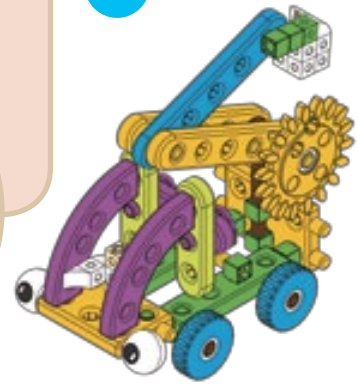
5



"I carry lots of equipment that firefighters use to put out fires," said Francine the Fire Truck.

6

Done!



Francine the Fire Truck quickly stopped the fire and saved the pet shop.

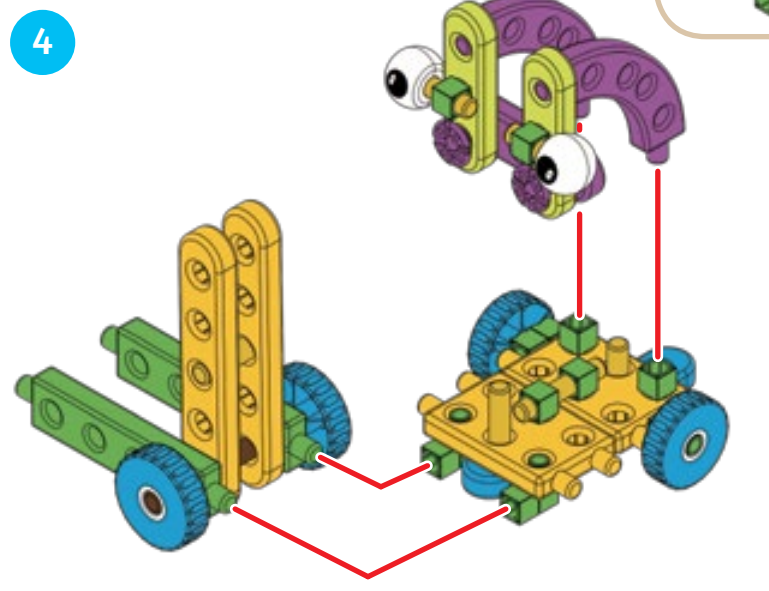
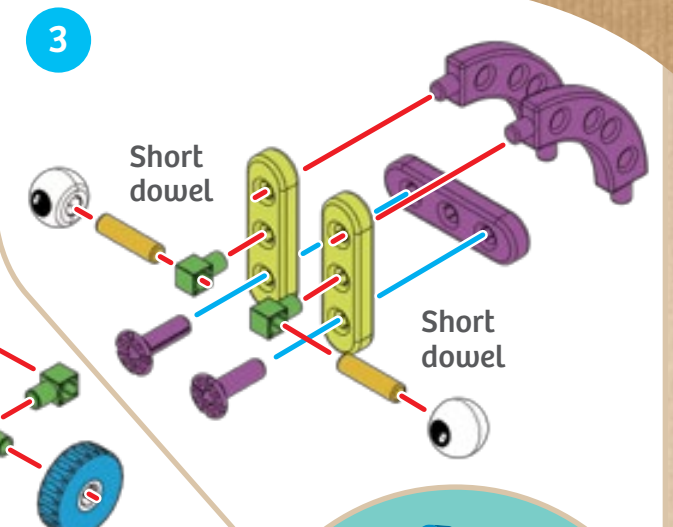
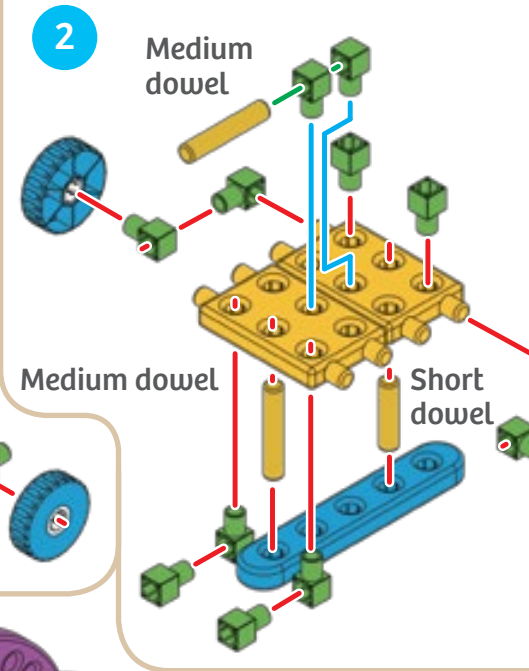
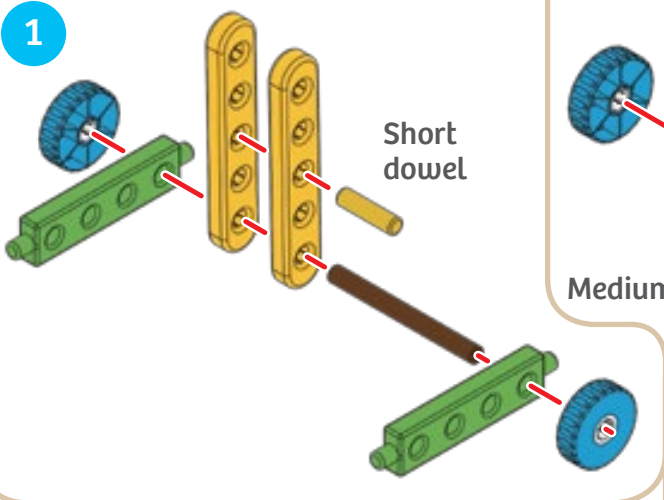
"Thank goodness you came!" Patty, the owner of the pet store exclaimed. "All the animals are safe and sound! But now I have another problem. All the crates have fallen out of the storage loft, and they are too heavy for me to put back on my own."

"Not a prob, Patty!" Ty smiled. "I'll whip up a forklift to move all these heavy crates back into place."





**FARLEY THE FORKLIFT**



"My forks can lift objects that are too heavy for people to lift," said Farley proudly.

Farley the Forklift made short work of picking up the pet food crates and putting them back in the storage loft.

"Thanks so much, Farley!" said Ty. "Okay, now we really have to get going to the store!"

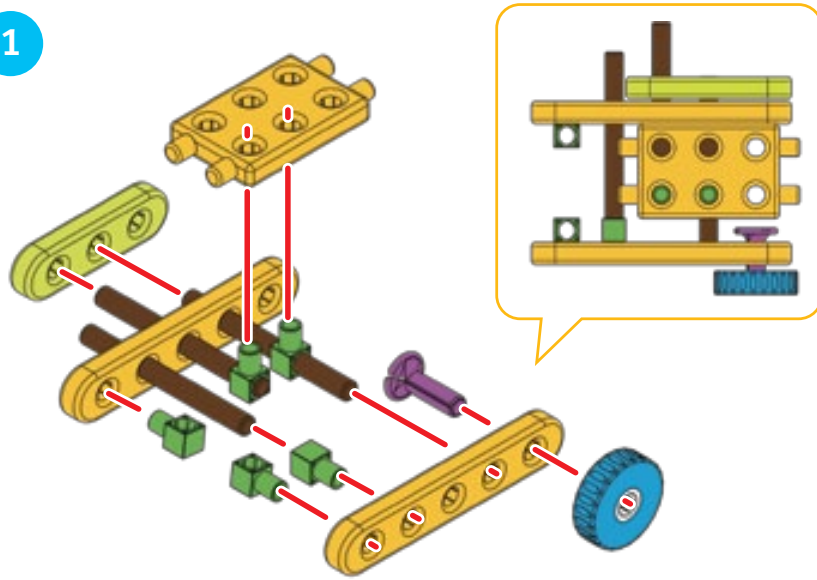
"I have an idea!" shouted Karlie. "Let's build a motorcycle. That will get us there fast!"

"That's a great idea," said Huxley. "Let's start building!"

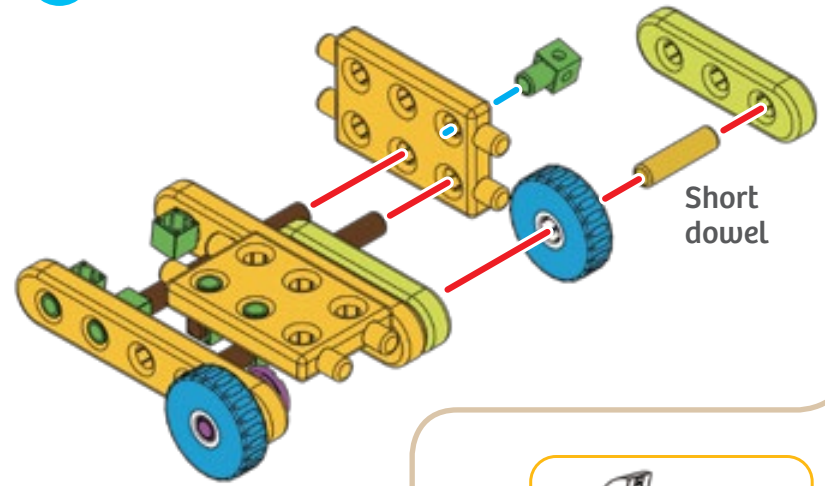


# MOCHA THE MOTORCYCLE WITH SIDECAR

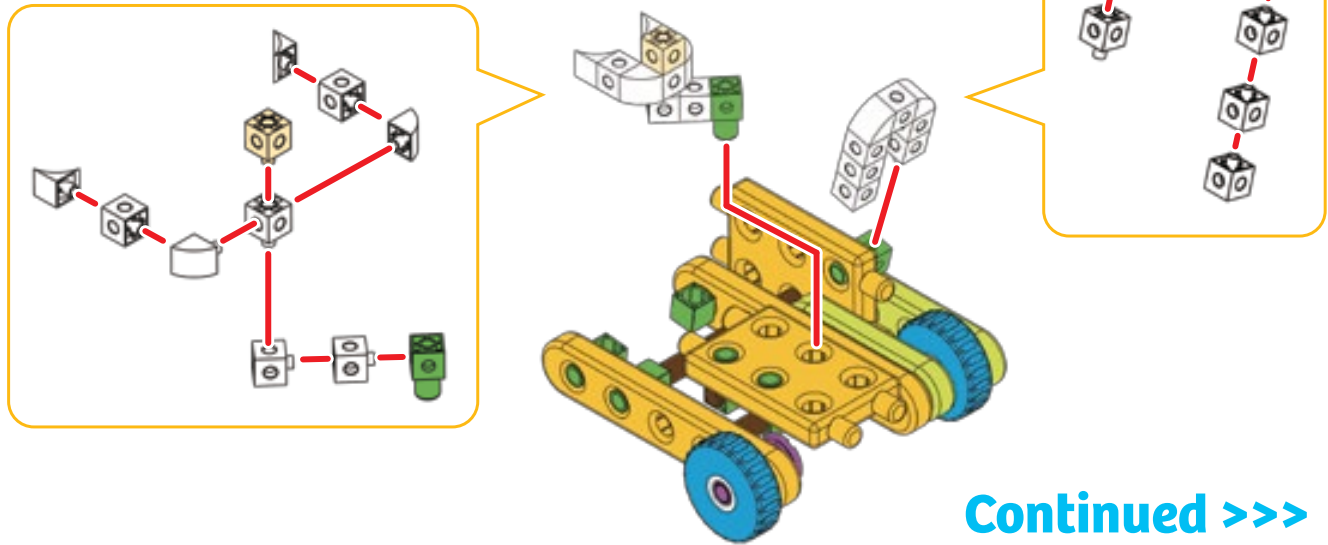
1



2

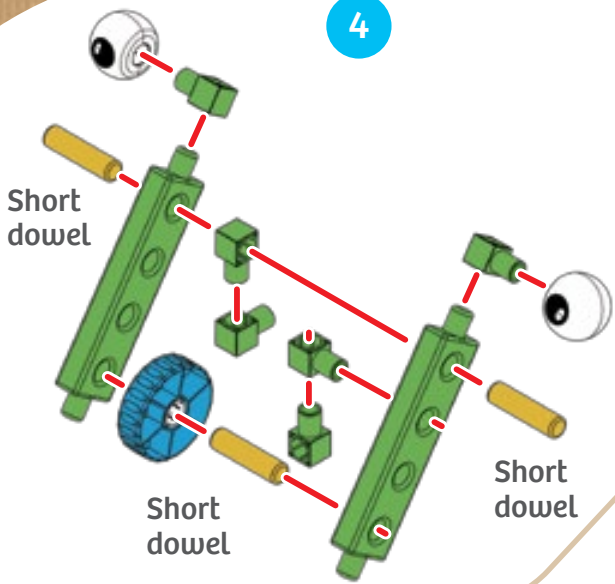


3

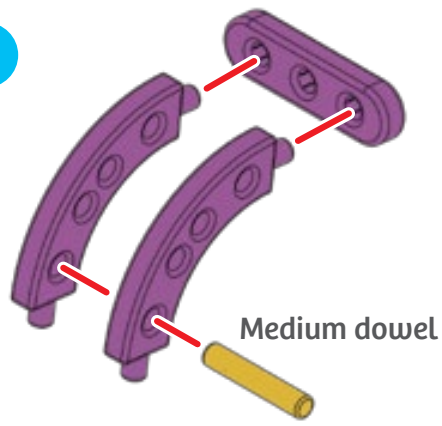


Continued >>>

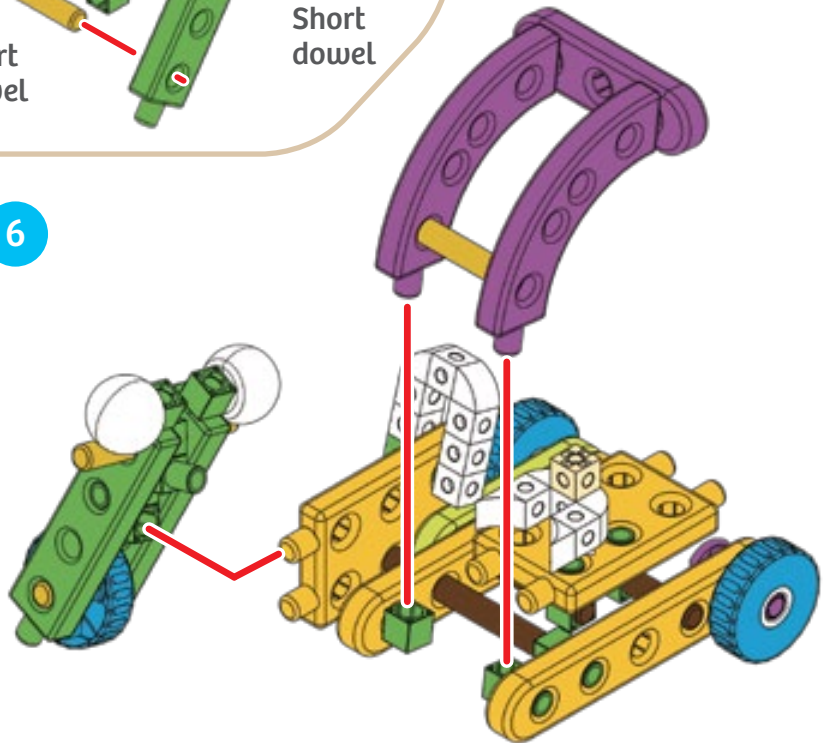
4



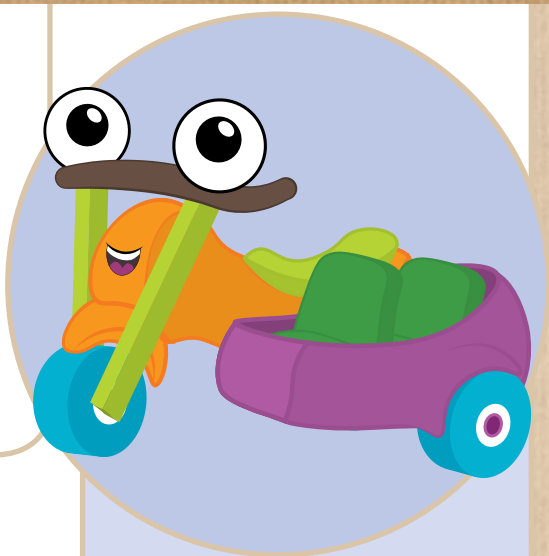
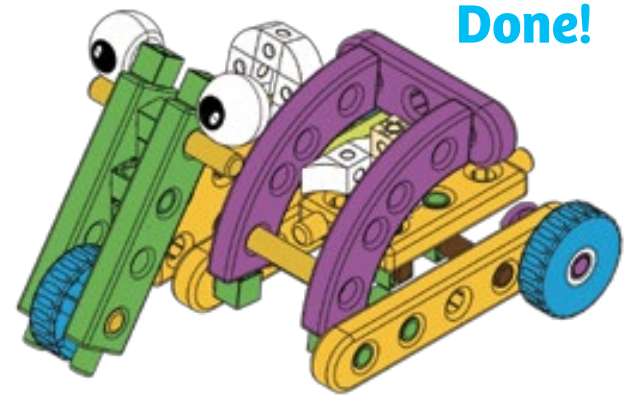
5



6



7



"Hop in, everybody! With my sidecar, there's plenty of room for all of you!" said Mocha the Motorcycle.

**Done!**



Thanks to Mocha the Motorcycle, they made it to the market in almost no time at all. They hastily bought all the ingredients on the list, and wheeled them out to the parking lot.

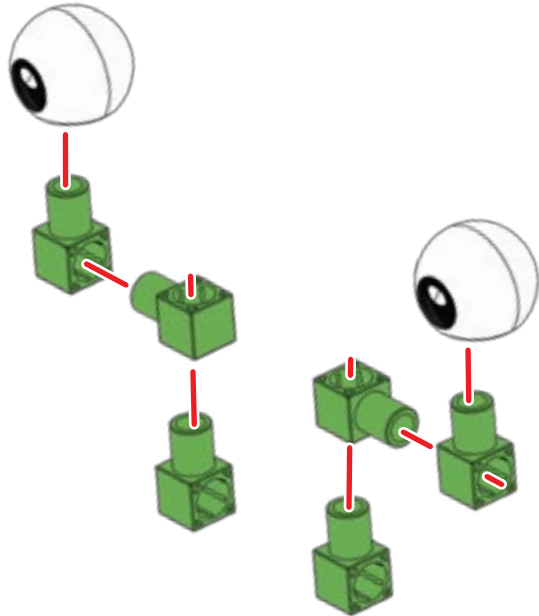
“Oh dear,” sighed Ty. “We definitely can’t fit all these grocery bags in the motorcycle, even with the sidecar. Why do you think dad needed ten big sacks of potatoes anyway?”

“I know! Let’s build a dune buggy big enough to hold the groceries, but small enough to take us on a fun off-road adventure on the way home,” suggested Karlie. “We could take the ridge trail through the forest. Hux, can you help us build a dune buggy?”

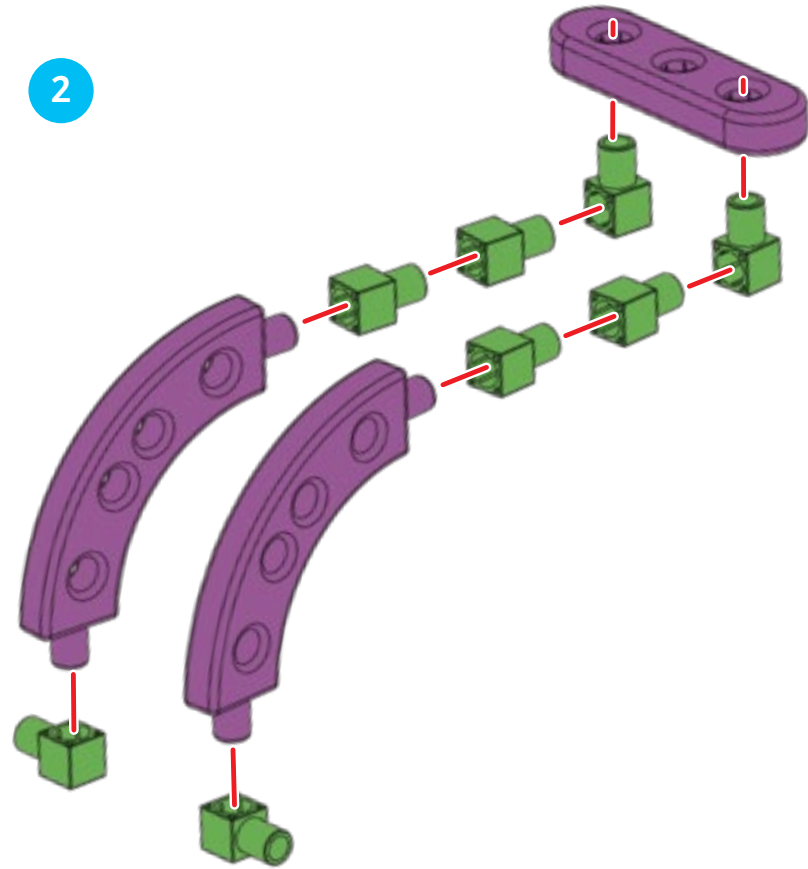
“Already working on it,” said Huxley with a twirl of his wrench.

BUGSY THE BUGGY TRUCK

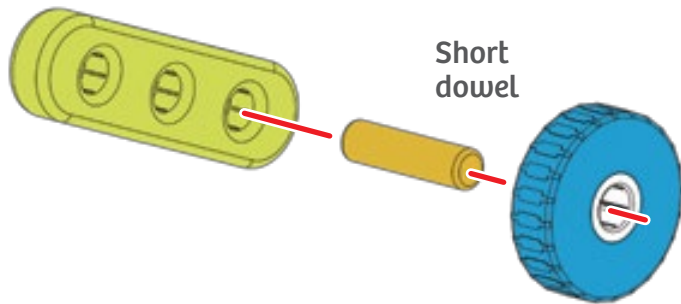
1



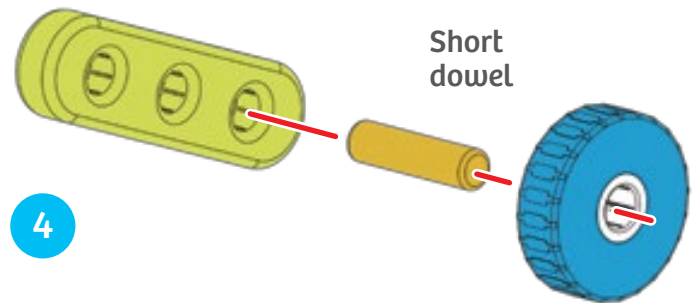
2



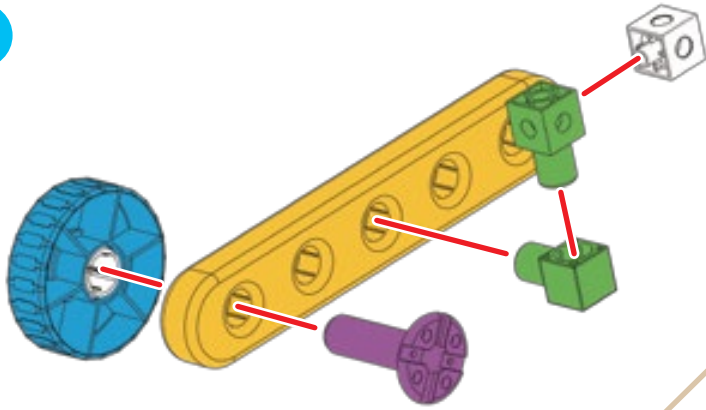
3



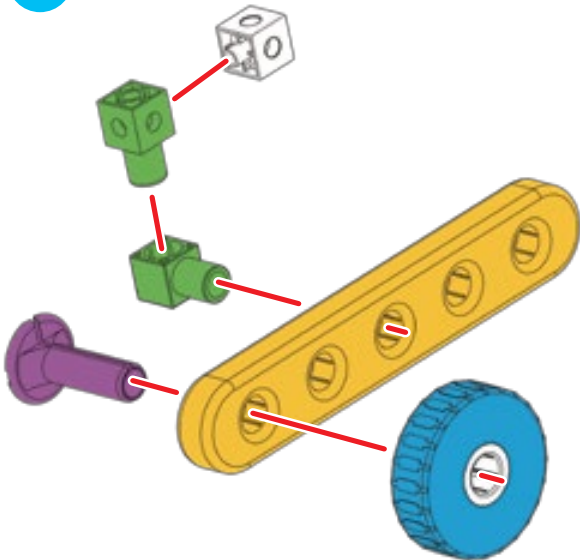
4



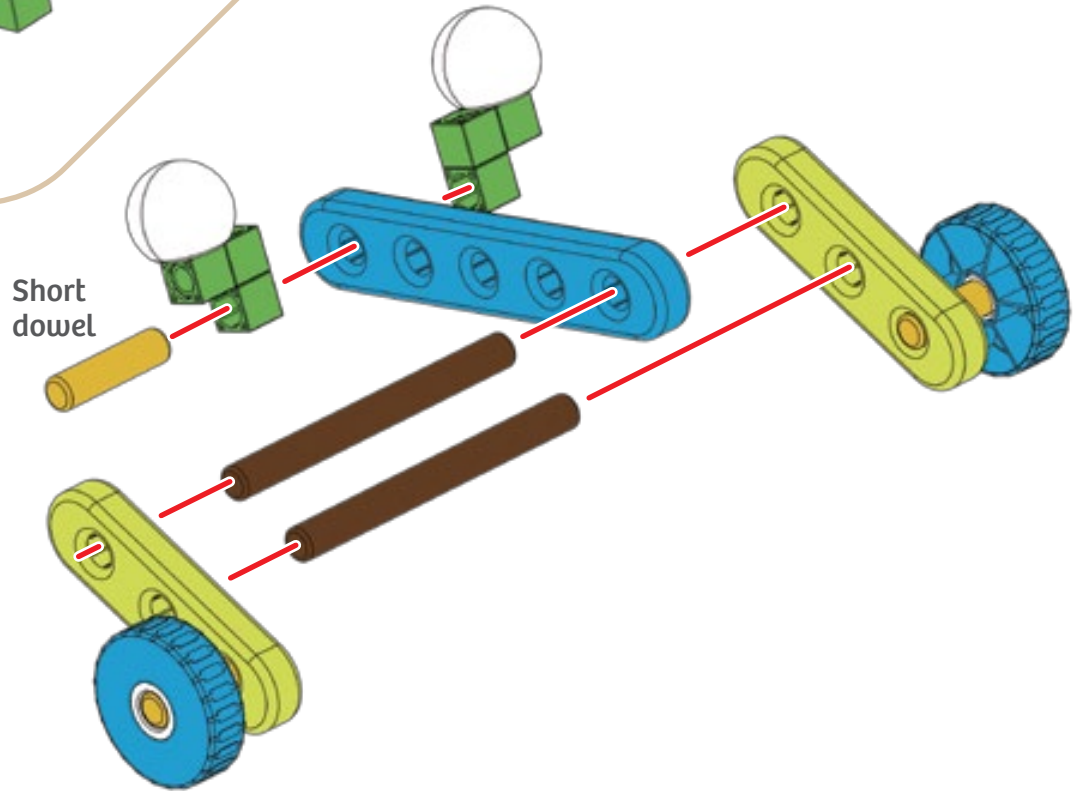
5



6

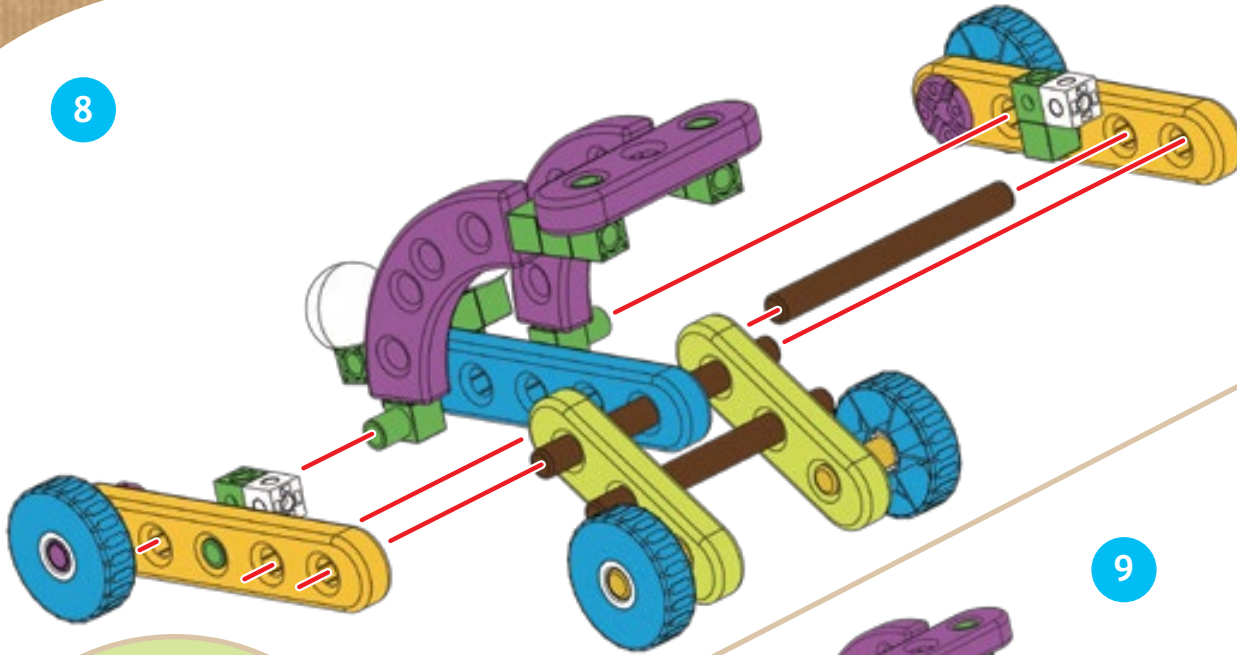


7



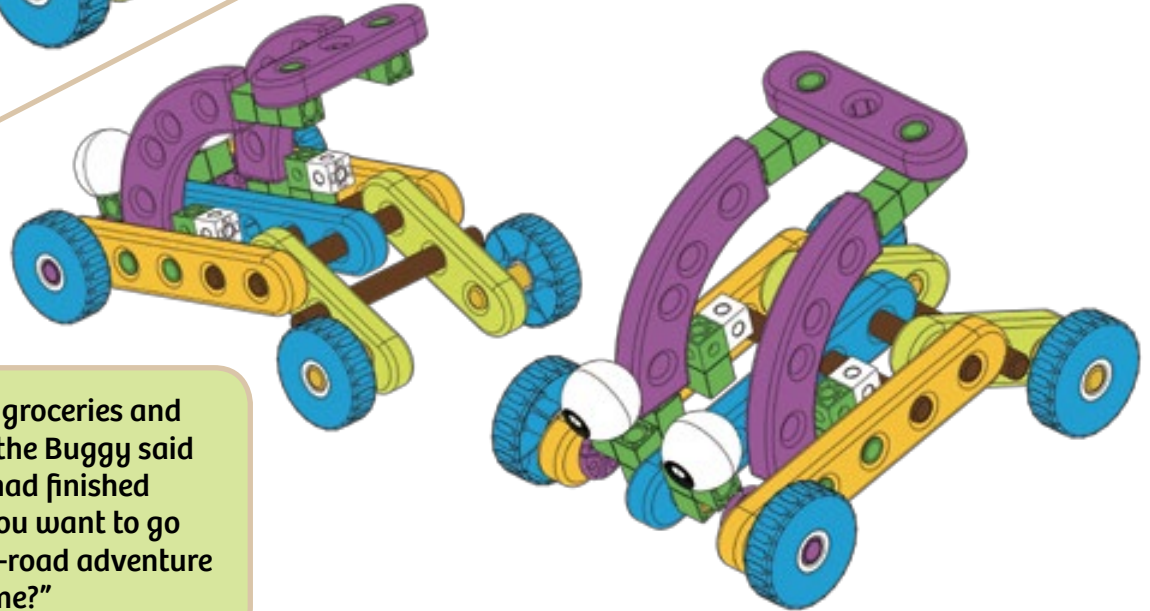
Continued >>>

8



9

Done!



"Load up those groceries and hop in," Buggy the Buggy said when the kids had finished building. "Do you want to go on a radical off-road adventure on the way home?"



Bugsy took them on a road that went around the outskirts of the town instead of through the center. Soon they were zooming on a dirt path that ran through beautiful forests and farmlands and by lakes and rivers.

When they passed a field of wheat, they saw Farmer Clyde. He had a big frown. They slowed down to see what was wrong.

“What’s the matter, Farmer Clyde?” Karlie asked.

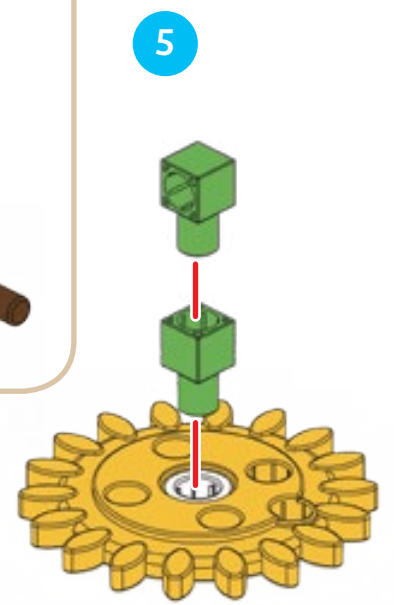
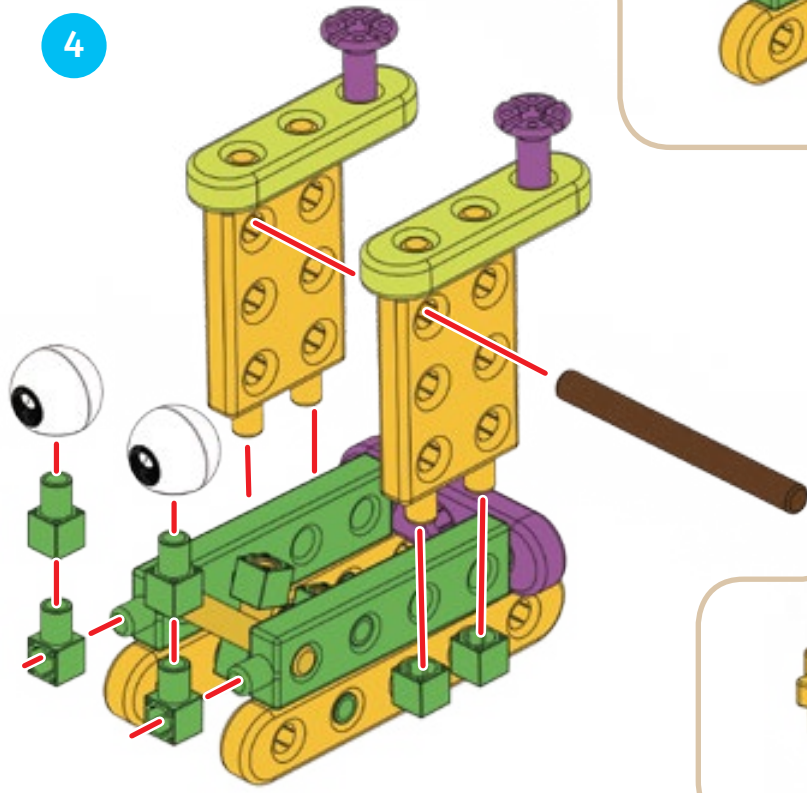
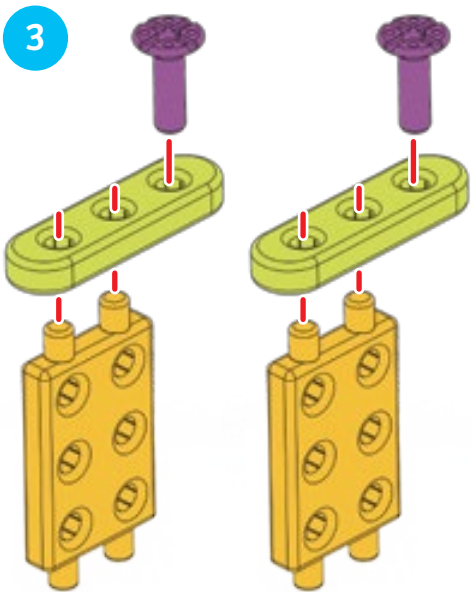
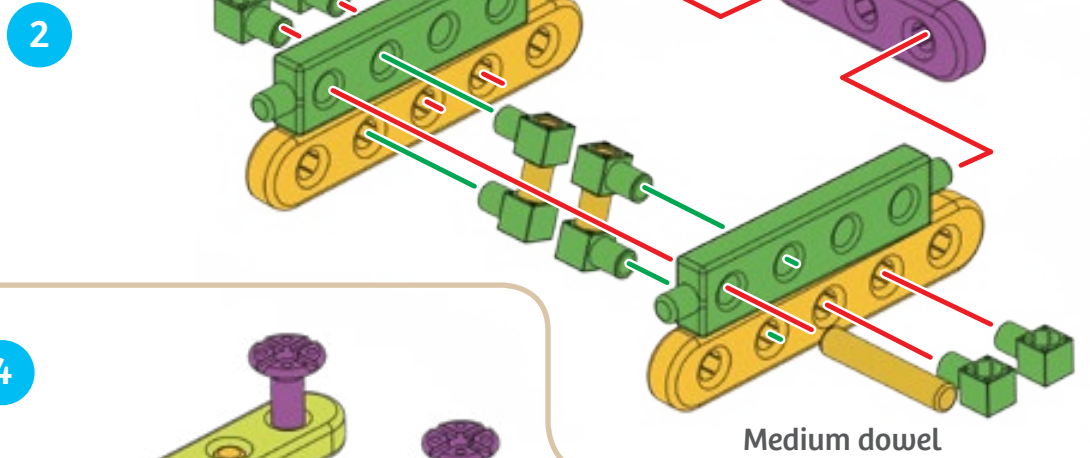
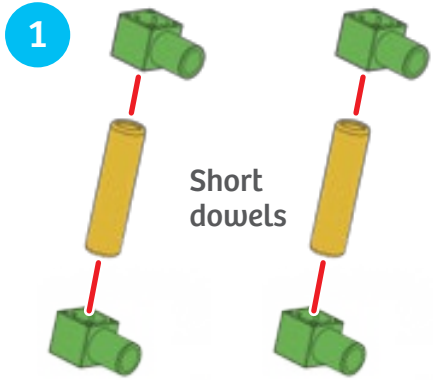
“Hi kids. My tractor is broken and I have to harvest all this

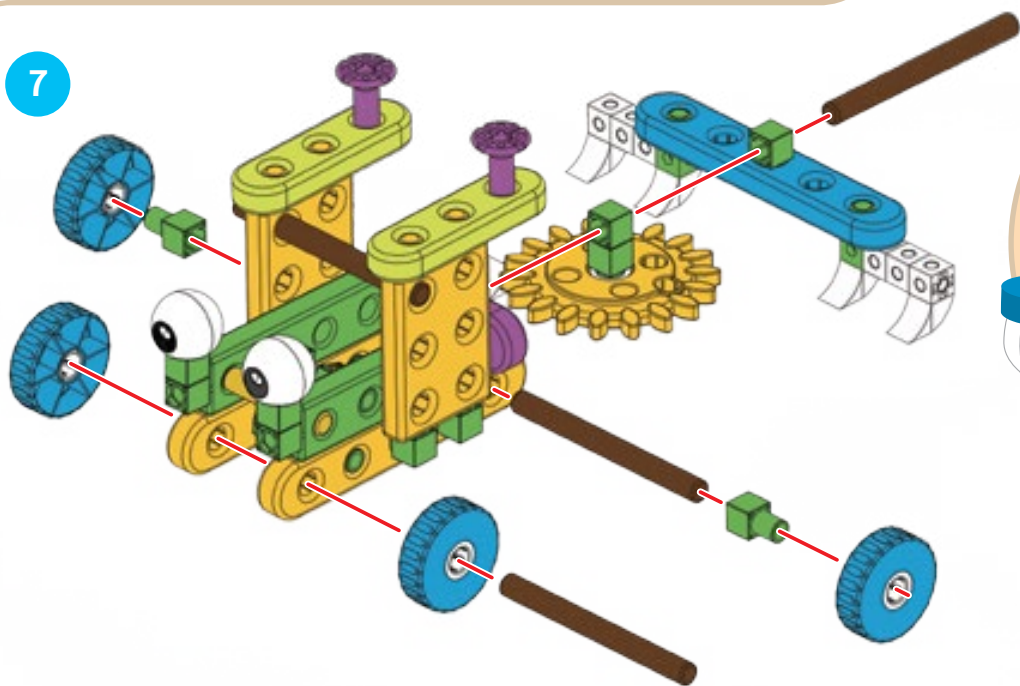
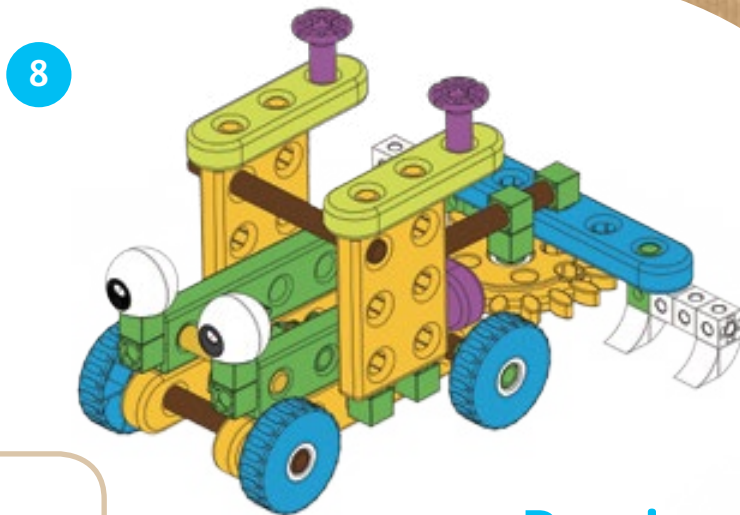
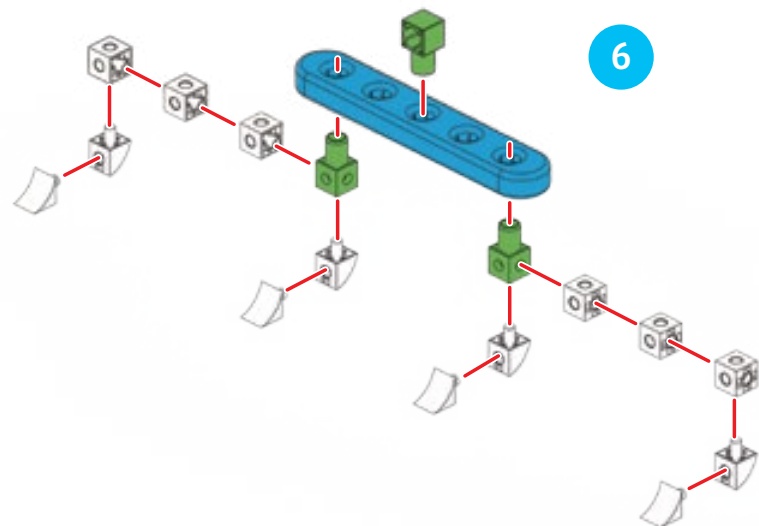
wheat!” Clyde replied. They turned their heads and gazed out on what seemed like endless acres of golden wheat.

“You’re in luck!” said Karlie. “I can build a harvester tractor to gather up all the wheat. Huxley, please give me a hand!”

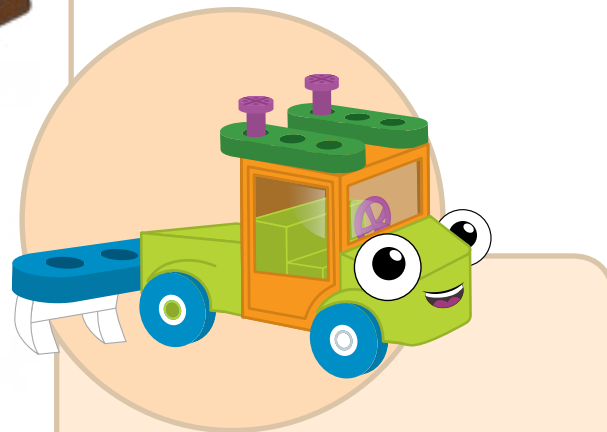


HARRY THE HARVESTER TRACTOR





Done!



"I can harvest all the wheat in these fields in no time!" exclaimed Harry the Harvester Tractor. "My combine harvester cuts the wheat and separates the grain from the chaff."

Harry the Harvester started harvesting the wheat.

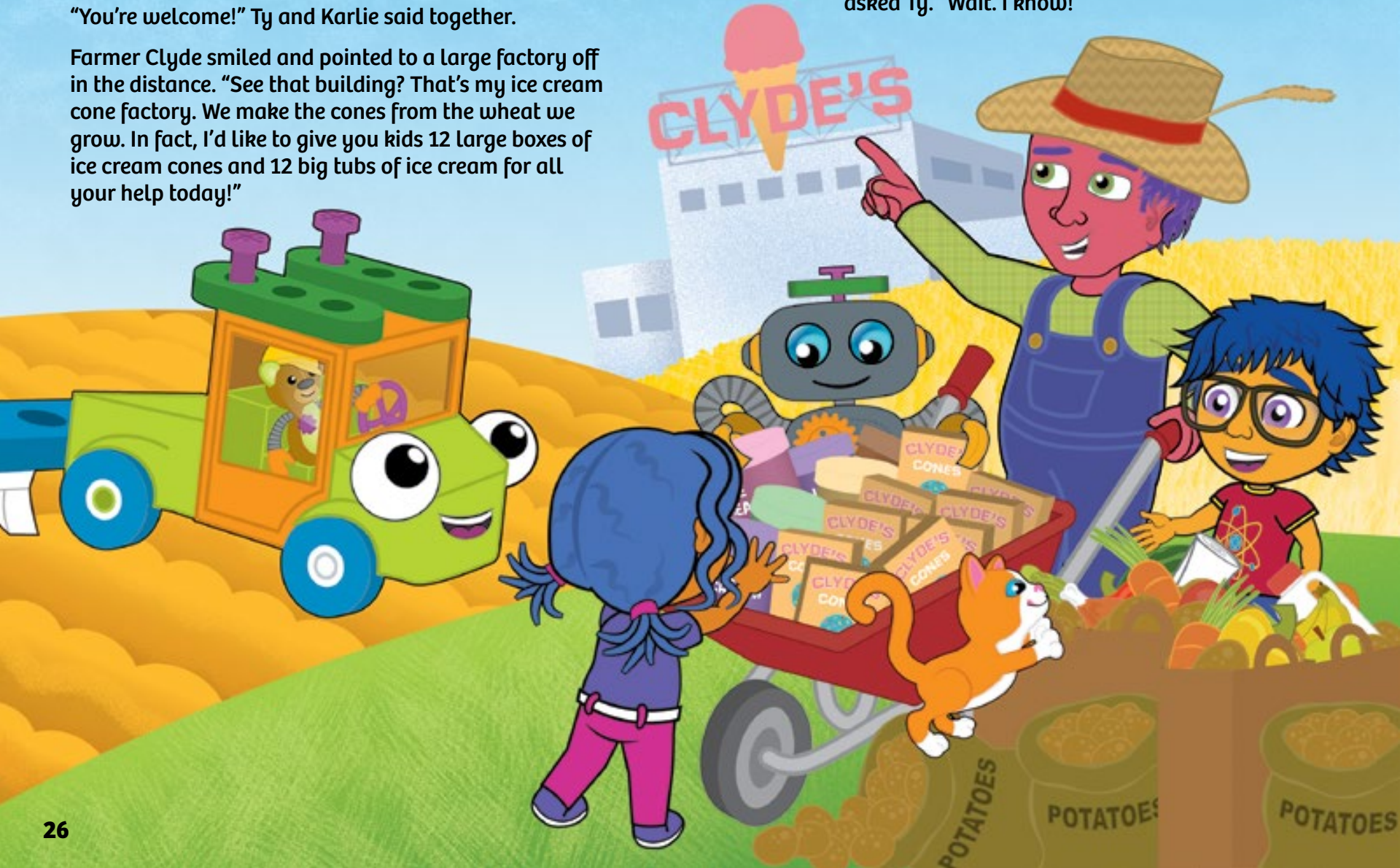
“Oh, this is wonderful! You’ve really saved the day,” said Farmer Clyde.

“You’re welcome!” Ty and Karlie said together.

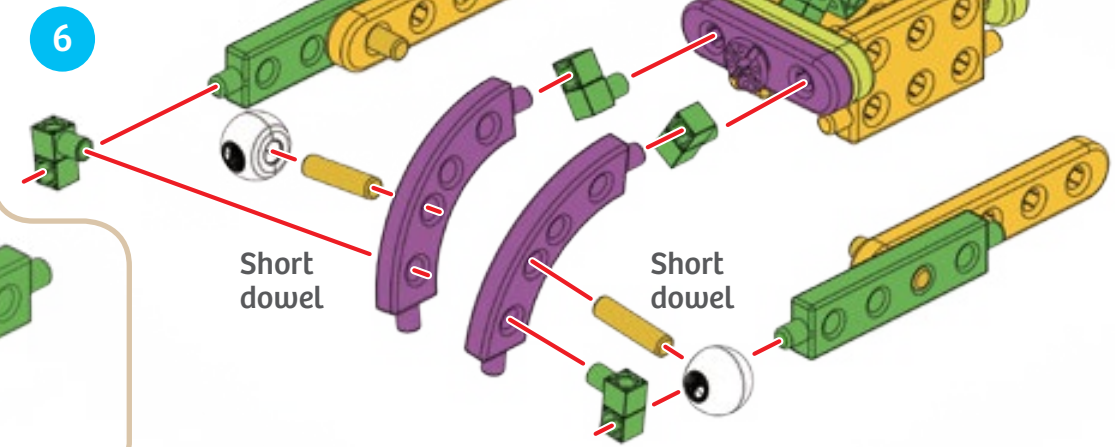
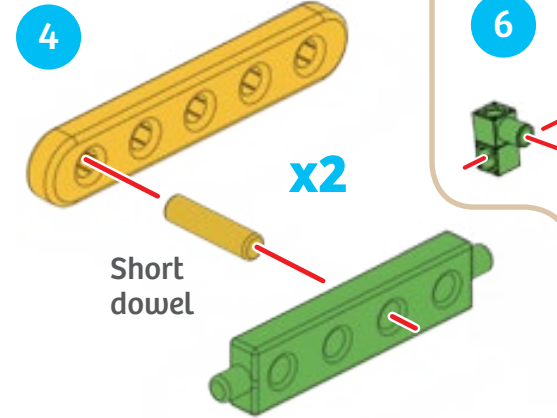
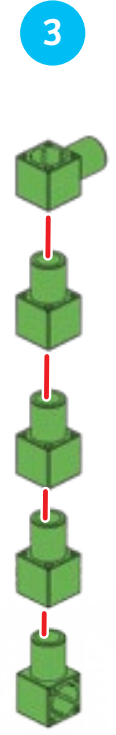
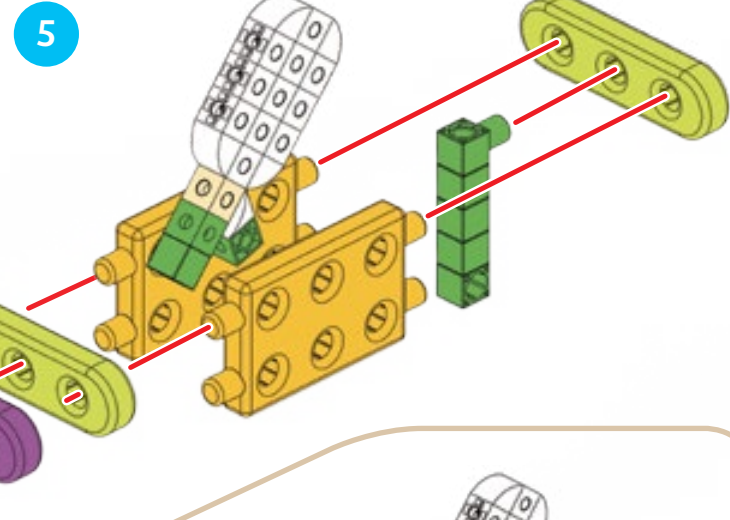
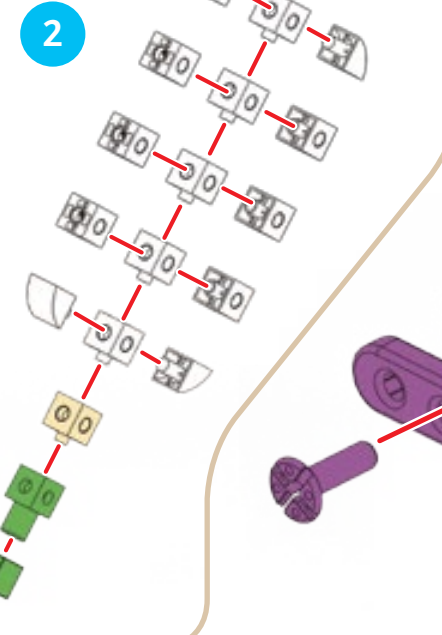
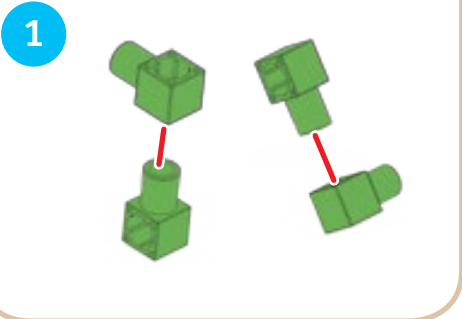
Farmer Clyde smiled and pointed to a large factory off in the distance. “See that building? That’s my ice cream cone factory. We make the cones from the wheat we grow. In fact, I’d like to give you kids 12 large boxes of ice cream cones and 12 big tubs of ice cream for all your help today!”

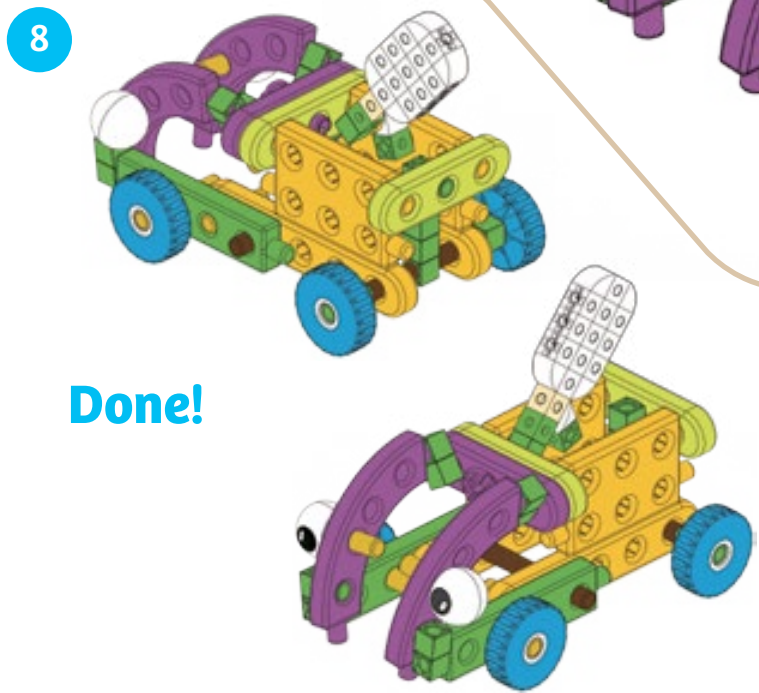
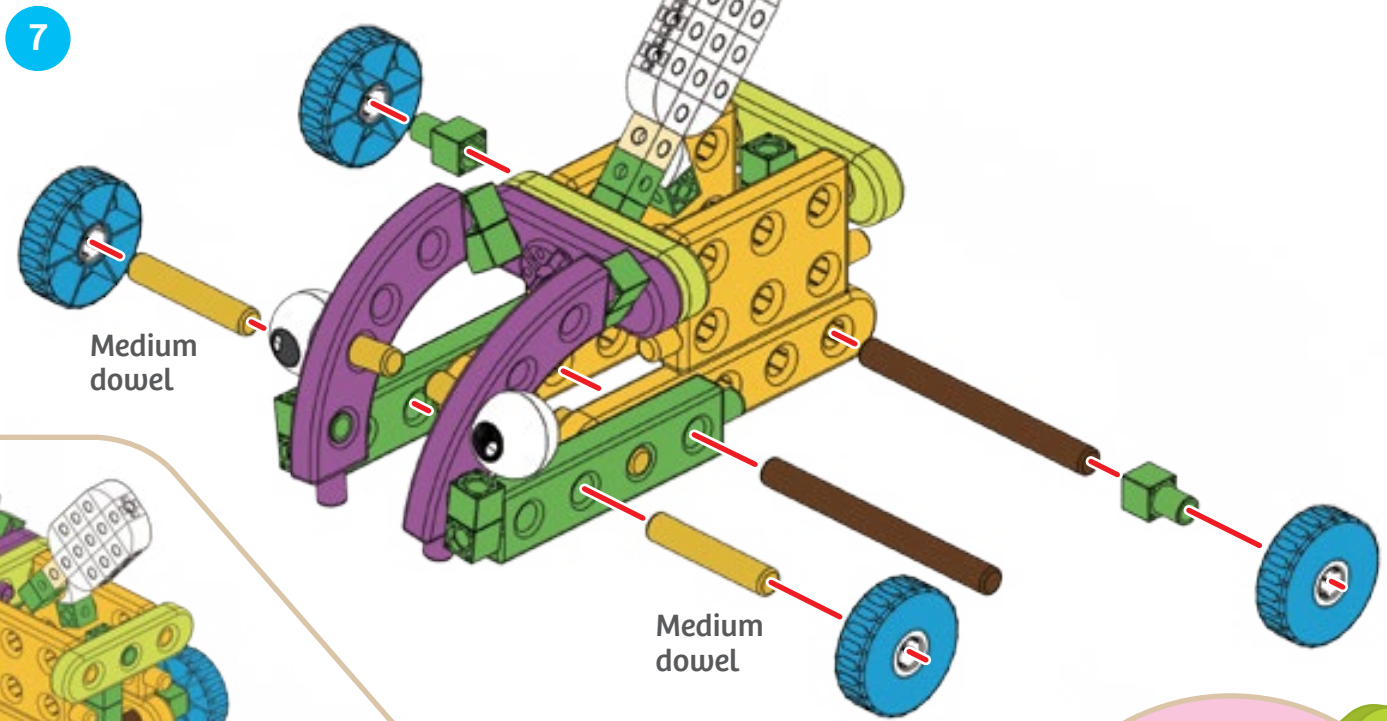
“Yippee! I love ice cream. Thanks Farmer Clyde!” exclaimed Karlie.

“How should we get all this ice cream back home?” asked Ty. “Wait. I know!”



### IRENE THE ICE CREAM TRUCK





"Hi there! Irene at your service"  
Irene the Ice Cream Truck sang in a  
melodious tune. "Where do you kids  
want to go with all this ice cream?"  
She sang every word with a jingle.  
"Let's take all this ice cream to the  
school. We can share it with all the  
kids there."



When they arrived at the school, Huxley scooped ice cream into cones for all the kids. His arms moved so fast that Ty and Karlie almost couldn't see them.

All the kids were very thankful for the ice cream cones.

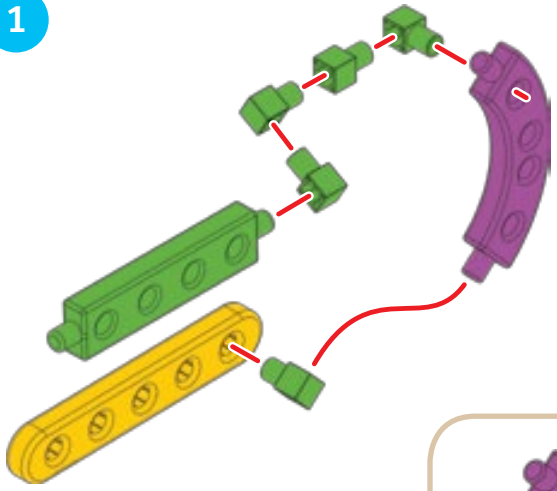
Just as they were about to leave, Karlie noticed that the school bus next to them had a flat tire. The school bus driver was distraught. She didn't know how she was going to take the kids home.

"We can help," Karlie said to the school bus driver. "I'll build a school bus and we can take the kids home."

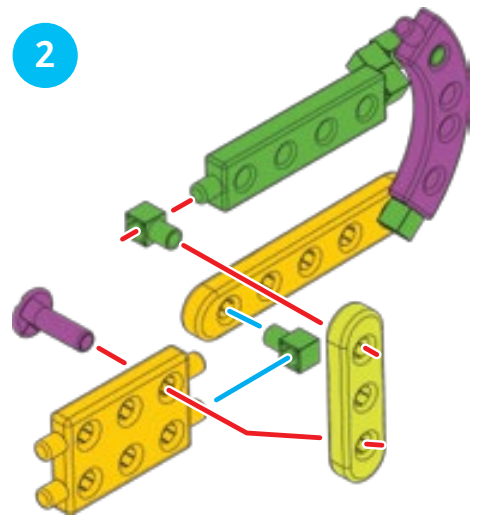


SHMOO THE SCHOOL BUS

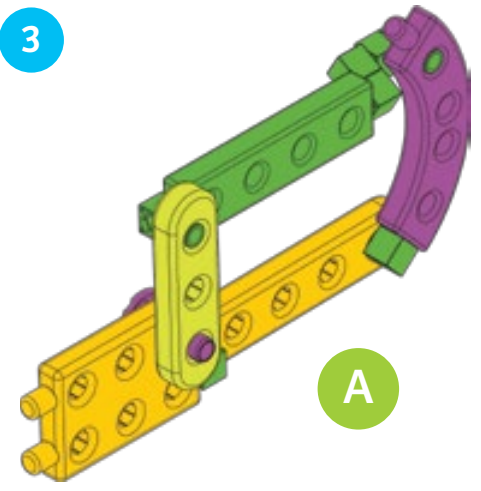
1



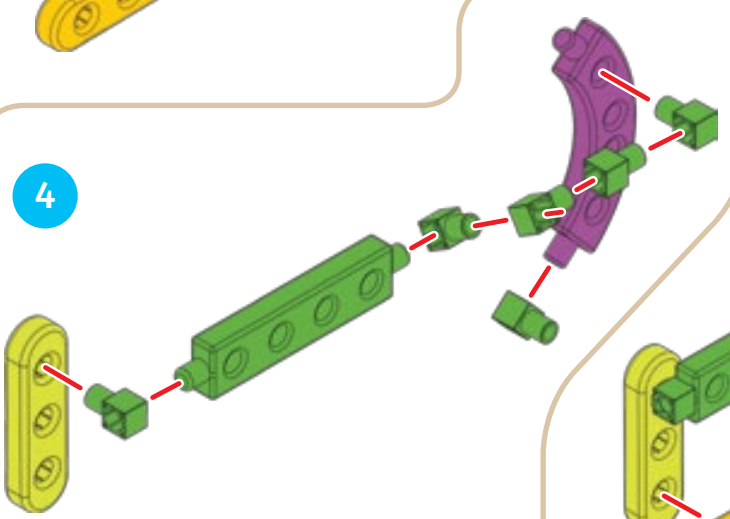
2



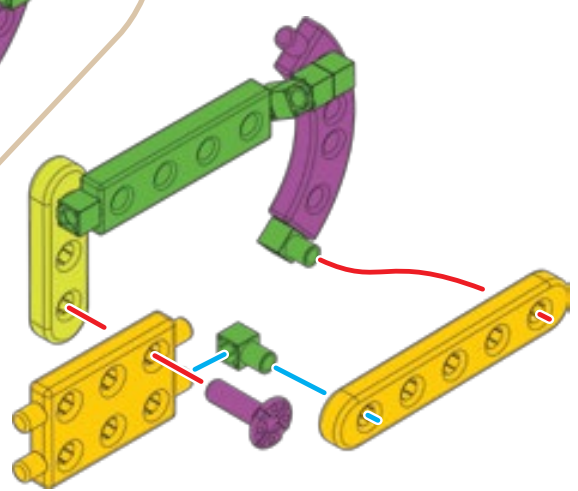
3



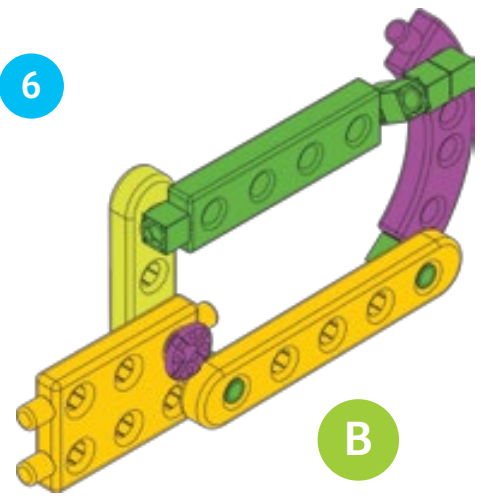
4



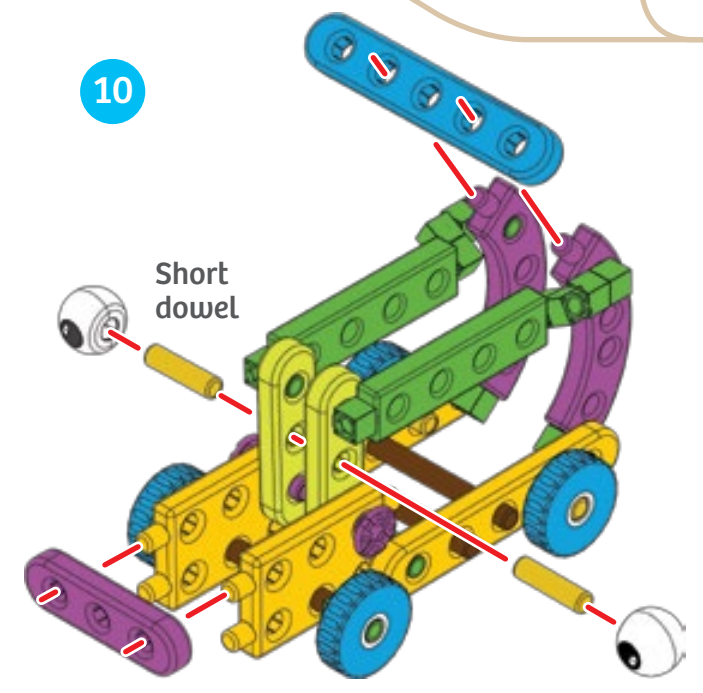
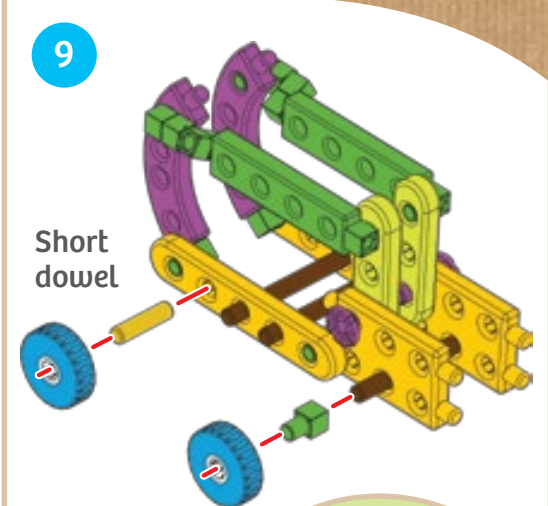
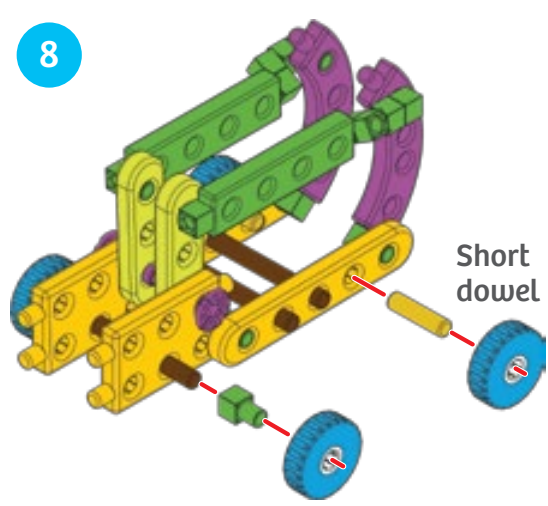
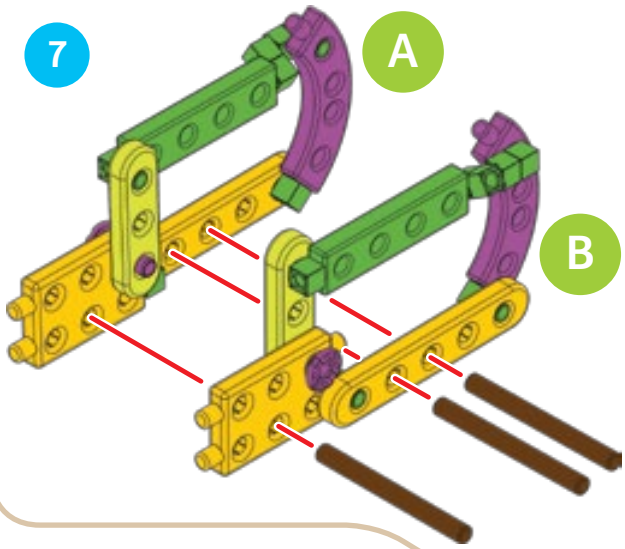
5



6







"All aboard!" Shmoo the School Bus shouted out to the kids. "Let's get Shmoooooving!"

The kids stepped into the bus and took their seats.

Shmoo took all the kids to their homes one by one. Then he drove Ty, Karlie, and Huxley back to their family's warehouse.

"We're back!" Karlie shouted as they hopped off the bus.

"Whoa! Looks like you had quite an adventure!" Mr. O exclaimed. "What's up with all these bags of potatoes?!"

"I meant '10 potatoes' not '10 bags of potatoes!'" Mom chuckled. "Well, it's a good thing I just built this automatic french fry making machine!"



2nd Edition 2015, 2016 Thames & Kosmos, LLC, Providence, RI, USA  
Thames & Kosmos® is a registered trademark of Thames & Kosmos, LLC.

This work, including all its parts, is copyright protected. Any use outside the specific limits of the copyright law without the consent of the publisher is prohibited and punishable by law. This applies specifically to reproductions, translations, microfilming, and storage and processing in electronic systems and networks. We do not guarantee that all material in this work is free from copyright or other protection.

Technical product development: Genius Toy Taiwan Co., Ltd., Taichung, Taiwan, R.O.C.  
Text: Ted McGuire  
Graphics and Packaging: Dan Freitas  
Illustrations: Dan Freitas and Ashley Greenleaf

Manual assembly instruction diagrams: Genius Toy Taiwan Co., Ltd., Taichung, Taiwan, R.O.C., and Thames & Kosmos  
Photos: Genius Toy Taiwan Co., Ltd., Taichung, Taiwan, R.O.C., and Thames & Kosmos

The publisher has made every effort to locate the holders of image rights for all of the photos used. If in any individual cases any holders of image rights have not been acknowledged, they are asked to provide evidence to the publisher of their image rights so that they may be paid an image fee in line with the industry standard.

Distributed in North America by Thames & Kosmos, LLC, Providence, RI 02903  
Phone: 800-587-2872; Web: [www.thamesandkosmos.com](http://www.thamesandkosmos.com)

Distributed in United Kingdom by Thames & Kosmos UK, LP, Goudhurst, Kent TN17 2QZ  
Phone: 01580 212000; Web: [www.thamesandkosmos.co.uk](http://www.thamesandkosmos.co.uk)

We reserve the right to make technical changes.

Printed in Taiwan / Imprimé en Taiwan

