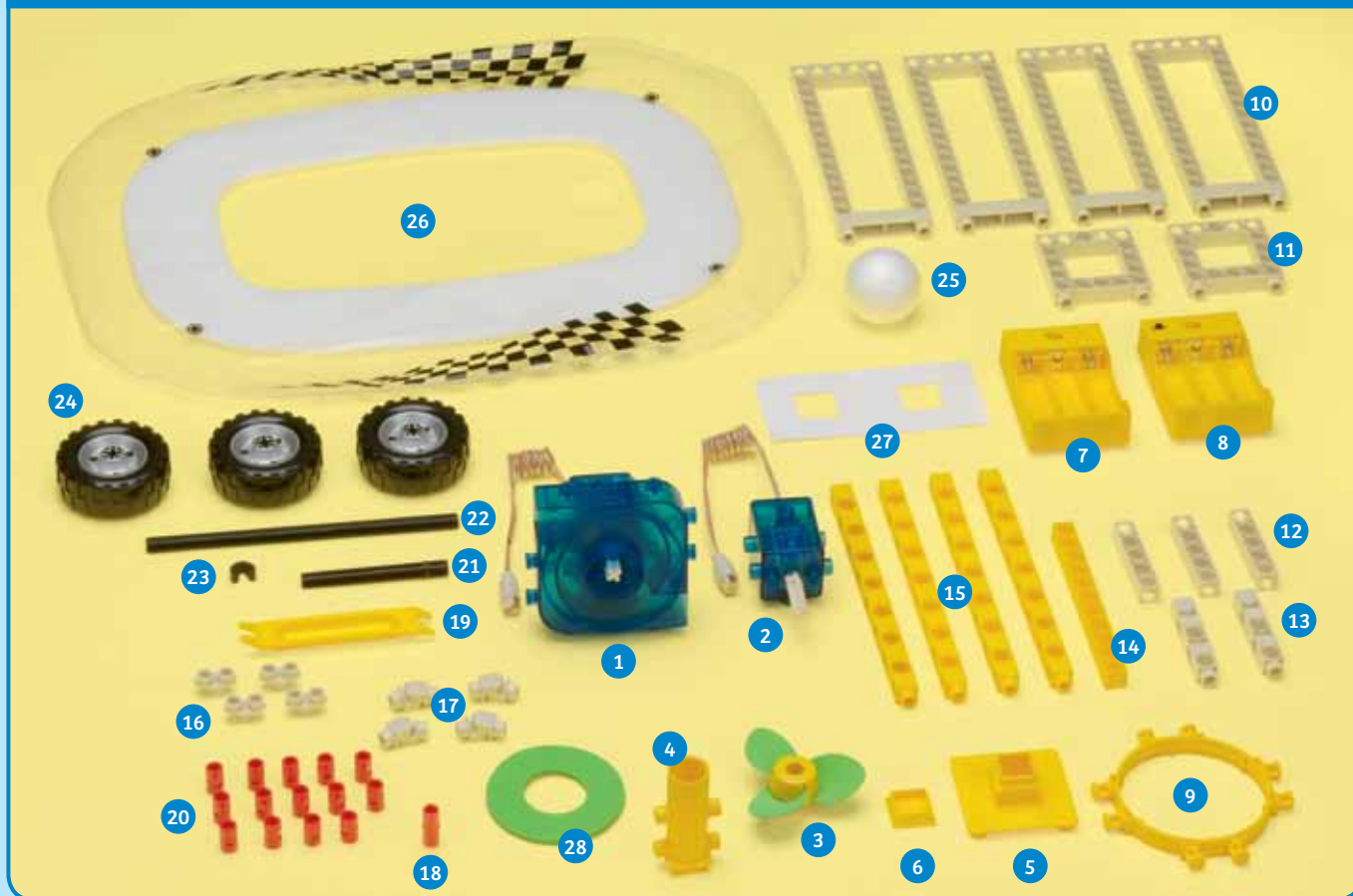


GOOD TO KNOW! If you are missing any of the parts from the kit, call Thames & Kosmos customer service.

Any materials not included in the kit are indicated in *italic script* under the "You will need" heading.

What's Inside Your Experiment Kit:



Checklist: Find – Inspect – Check off

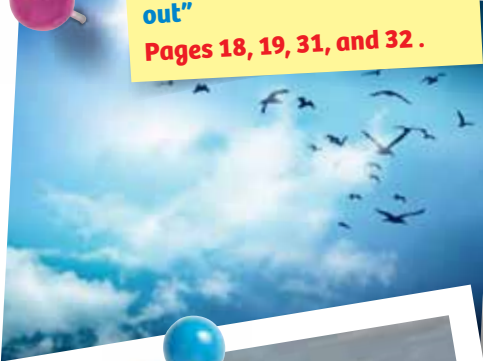
✓	No..	Description	Qty.	Item No.
<input type="radio"/>	1	Air motor	1	713 636
<input type="radio"/>	2	Drive motor	1	713 639
<input type="radio"/>	3	Propeller	1	713 638
<input type="radio"/>	4	Fan tube	1	713 640
<input type="radio"/>	5	Mounting bracket	1	713 641
<input type="radio"/>	6	Cover	1	713 642
<input type="radio"/>	7	Battery Box	1	713 647
<input type="radio"/>	8	Battery Box with switch	1	713 646
<input type="radio"/>	9	Ring	1	712 982
<input type="radio"/>	10	Long frame	4	703 239
<input type="radio"/>	11	Square frame	2	705 016
<input type="radio"/>	12	5-hole rod	3	704 063
<input type="radio"/>	13	5-hole dual rod	2	705 012
<input type="radio"/>	14	11-hole rod	1	712 986

✓	No..	Description	Qty.	Item No.
<input type="radio"/>	15	Long rod	4	707 046
<input type="radio"/>	16	Two-to-one converter	4	705 010
<input type="radio"/>	17	Hinge	4	705 011
<input type="radio"/>	18	Joint pin	1	702 524
<input type="radio"/>	19	Part separator tool	1	702 590
<input type="radio"/>	20	Anchor pin	14	702 527
<input type="radio"/>	21	Axle	1	713 490
<input type="radio"/>	22	XL axle	1	703 518
<input type="radio"/>	23	Axle lock	1	702 813
<input type="radio"/>	24	Wheel	3	712 336
<input type="radio"/>	25	Polystyrene ball	1	713 645
<input type="radio"/>	26	Air cushion	1	713 637
<input type="radio"/>	27	Double-sided stickers	1	713 643
<input type="radio"/>	28	Green foam rubber	1	713 644

You will also need: 6 x 1.5-volt batteries (type AA/LR6/penlight), paper, scissors, pen, tape, kitchen scale, thin books, board (about 70 x 30 cm)

>>> CONTENTS

TIP!
 You will find additional information here: "Check it out"
 Pages 18, 19, 31, and 32.



Safety Information inside front cover

An experiment to help you hit the ground running 1
 Kit Contents..... 2
 Table of Contents 3
 Tips and Tricks 4

EXPERIMENTS

Hovercraft 6
 Floating on a cushion of air — can you really do that? Of course! Fire up the motor and propeller and your hovercraft will soon be zooming off. How much power do you think it has?

The models:

Hovercraft 7
 Propeller hovercraft 9
 Floating ball 11
 Curling stone 13
 Transport hovercraft I 14
 Transport hovercraft II 16

More Air-Stream Models 20

Wow, air sure is strong! Here's where you'll learn about all the other things you can do with it. Lots of fun games and even a car are invited to the party.

The models:

Air basketball..... 21
 Air-stream batting machine 24
 Carousel 26
 Race car 28

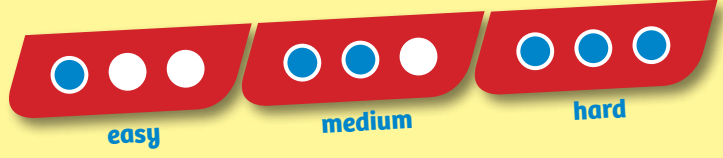
Publisher's information inside back cover



TIP!

Above each model, you will find a red bar.

>>> The bar shows you how hard the model is to assemble:



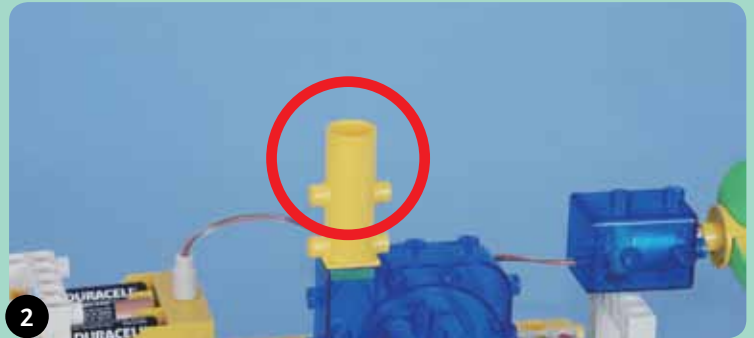
Magic ball on a stream of air

YOU WILL NEED

- > The assembled hovercraft
- > 6 x 1.5-volt batteries (type AA/LR6/penlight)
- > 1 board for a ramp (about 30 cm wide and 60 – 80 cm long)

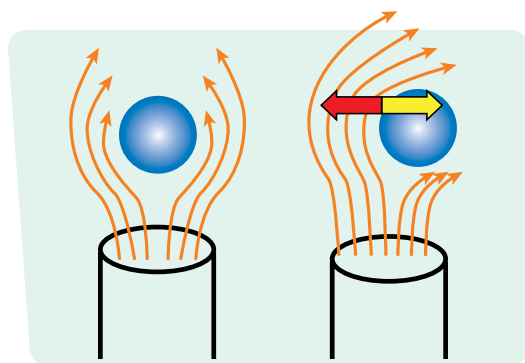
HERE'S HOW

1. Insert the batteries into the battery boxes.
2. Once the air motor has lifted up the hovercraft, place the white polystyrene ball on the stream of air. The air from the air motor will lift up the hovercraft and keep the ball levitated at the same time.
3. Now place the board with one end on the hovercraft kit box and the other end on the floor. This will act as a ramp. Set the craft at the top of the ramp and place the ball on the air stream. Let the craft glide down the ramp.



WHAT'S HAPPENING?

The air flows around the ball and holds it aloft, as if by invisible hands. The ball will float and sometimes dance around a little. If it does that too much, it might fall. If that happens, simply place it back on the air stream. Even when the craft glides down the ramp, the ball remains caught in the air stream.



DID YOU KNOW...

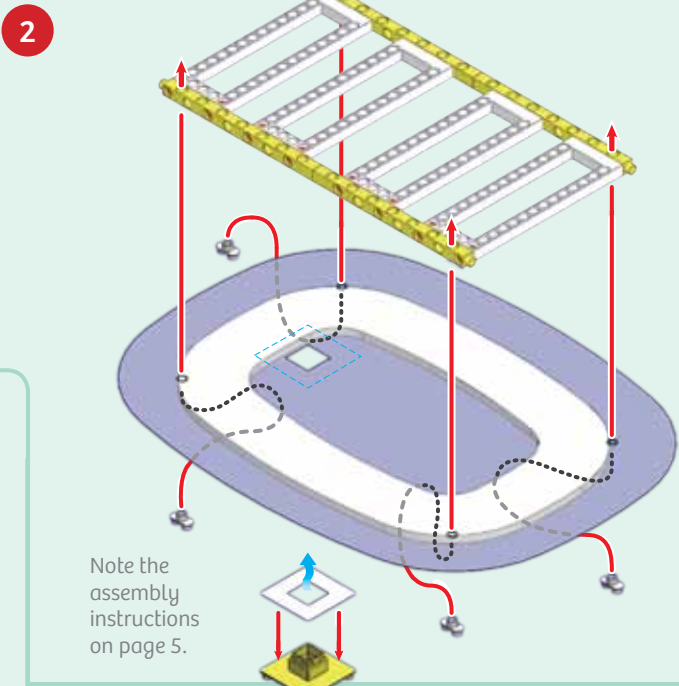
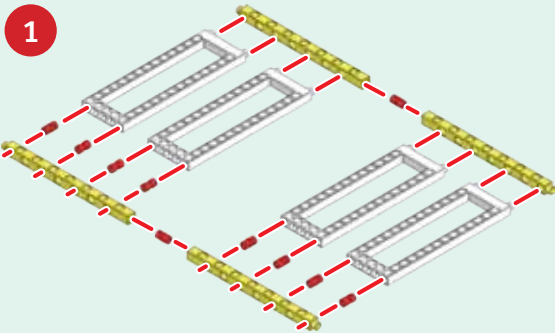
The ball is held aloft by the air that flows tightly around it. This is known as the Coandă effect.



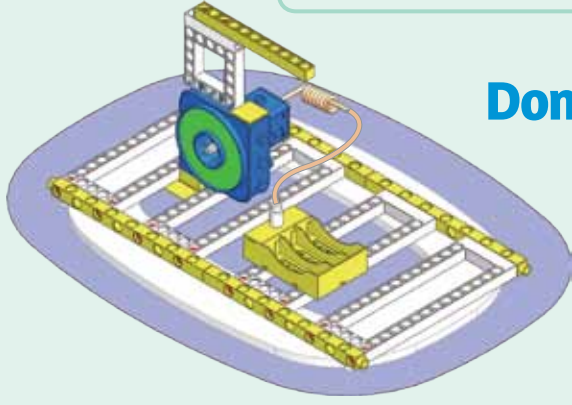
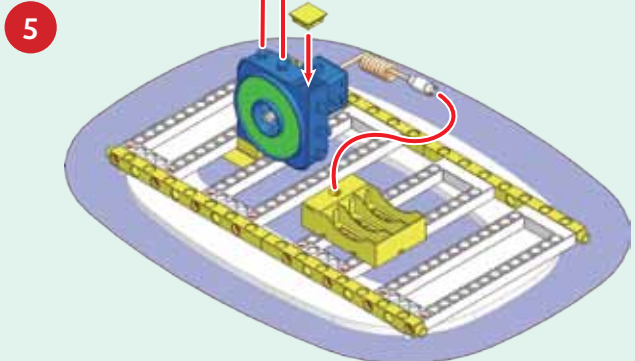
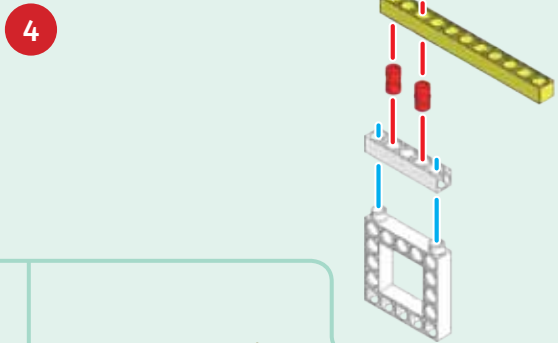
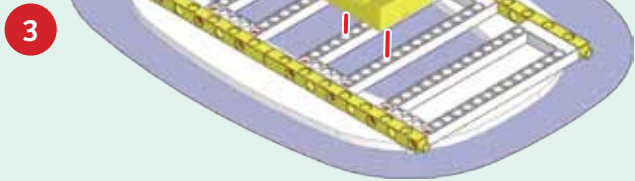
CURLING STONE

TIP!
Operate it on land!

- 1x 1 (Blue motor)
- 1x 5 (Yellow motor housing)
- 1x 6 (Yellow motor housing)
- 1x 7 (Yellow motor housing)
- 4x 10 (White Technic beam)
- 1x 11 (White Technic frame)
- 1x 12 (Yellow Technic beam)
- 1x 14 (Yellow Technic beam)
- 1x 20 (Red Technic pin)
- 1x 26 (Foam rubber)
- 1x 27 (White Technic plate)
- 4x 15 (Yellow Technic beam)
- 4x 16 (Grey Technic pin)
- 12x 20 (Red Technic pin)
- 1x 28 (Green Technic ring)



See page 4 for how to attach the foam rubber to the air motor.



Done!