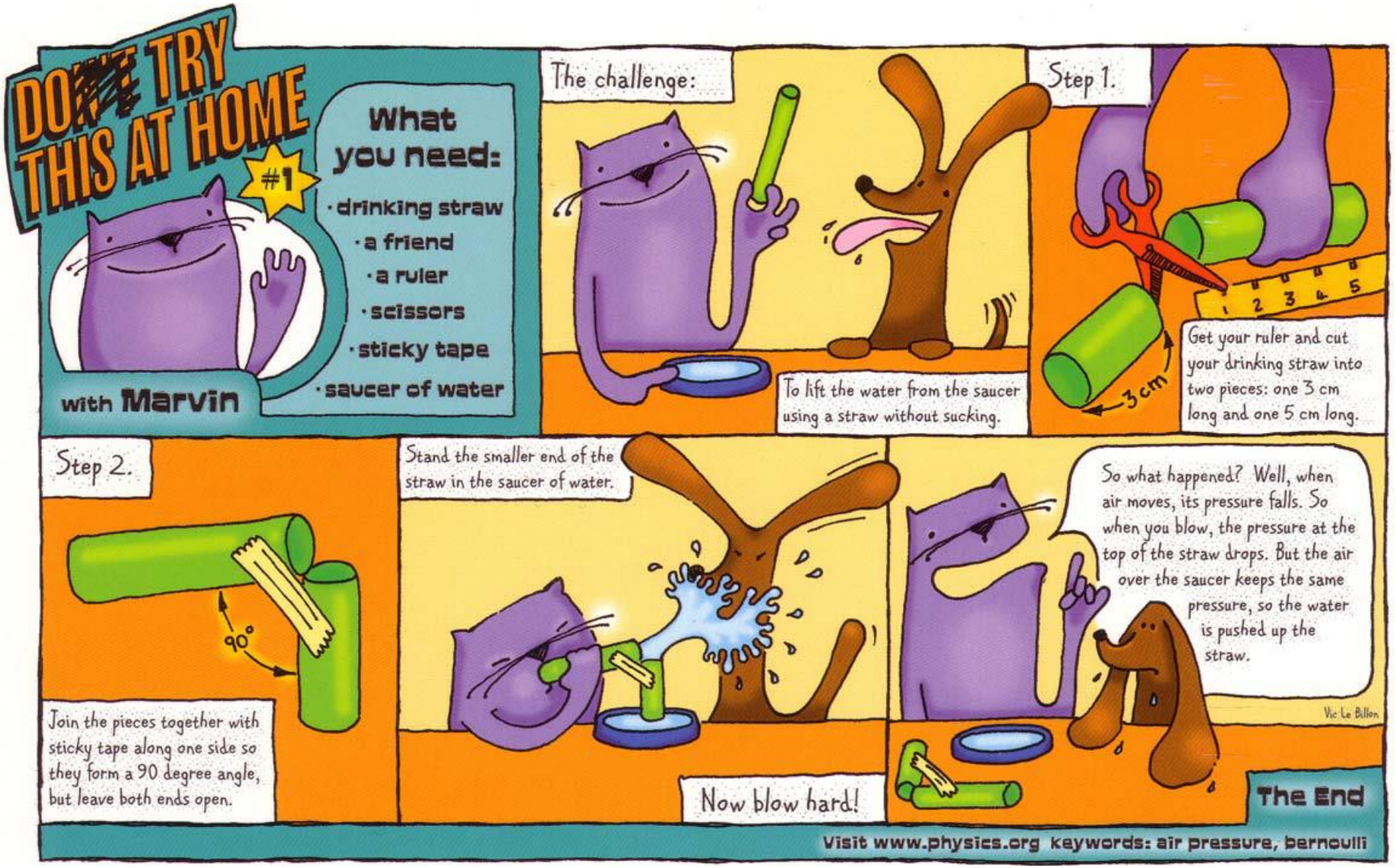
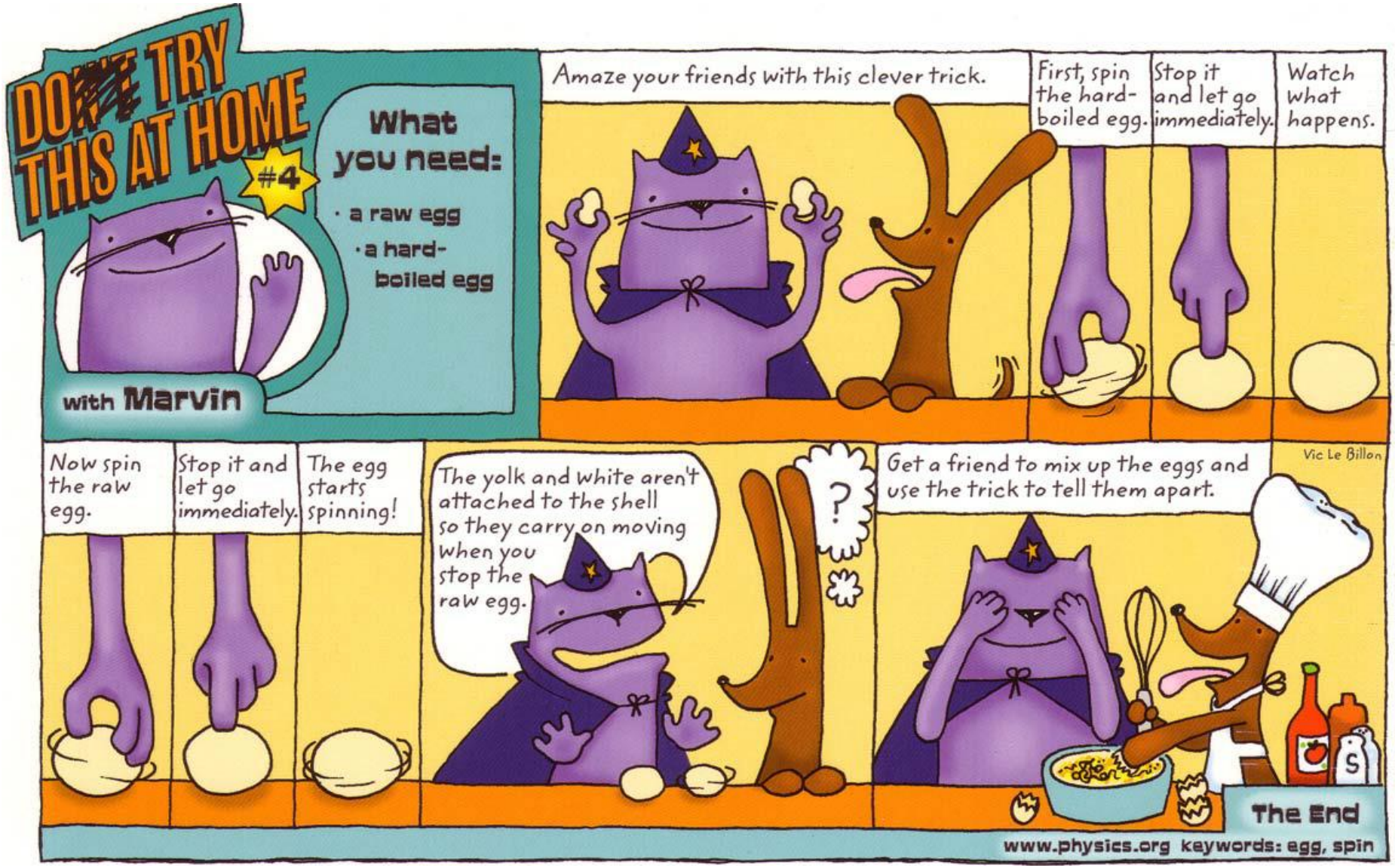

DON'T TRY THIS AT HOME
#1
with Marvin
What you need:
· drinking straw
· a friend
· a ruler
· scissors
· sticky tape
· saucer of water
The challenge:
To lift the water from the saucer using a straw without sucking.
Step 1.
3 cm
Get your ruler and cut your drinking straw into two pieces: one 3 cm long and one 5 cm long.
Step 2.
90°
Join the pieces together with sticky tape along one side so they form a 90 degree angle, but leave both ends open.
Stand the smaller end of the straw in the saucer of water.
Now blow hard!
So what happened? Well, when air moves, its pressure falls. So when you blow, the pressure at the top of the straw drops. But the air over the saucer keeps the same pressure, so the water is pushed up the straw.
Vic Le Billon
The End
Visit www.physics.org keywords: air pressure, bernoulli


DON'T TRY THIS AT HOME
#2
with Marvin
What you need:
· a nylon comb
· a water tap
Turn on the tap until you have a very thin stream of water.
Now grab your comb.
Vic Le Billon
Run the comb through your hair several times.
Slowly bring the comb towards the water, 10 cm below the tap.
When the comb is about 3 cm away, the water bends towards it!
Some objects, like hair and plastic, develop an electrical charge when rubbed together.
The charge in your comb attracts tiny electrical charges in the water molecules, pulling them towards it.
The End
www.physics.org keywords: electrostatics, charge


DON'T TRY THIS AT HOME
#3
with Marvin
What you need:
· a microwave
· a bar of quality soap
Bonjour! Today we are going to create soap art.
?
Put the soap on a dish in the microwave.
01:00
Heat it on full power for about 1 min.
What happened?
00:00
WARNING:
The soap may smell strongly so don't do this before heating food!
Tiny pockets of gas in the soap get hot and expand in all directions, pushing the soap into strange and artistic shapes.
Vic Le Billon
The End
www.physics.org keywords: thermodynamics


DON'T TRY THIS AT HOME
#4
with Marvin
What you need:
· a raw egg
· a hard-boiled egg
Amaze your friends with this clever trick.
First, spin the hard-boiled egg.
Stop it and let go immediately.
Watch what happens.
Now spin the raw egg.
Stop it and let go immediately.
The egg starts spinning!
The yolk and white aren't attached to the shell so they carry on moving when you stop the raw egg.
?
Get a friend to mix up the eggs and use the trick to tell them apart.
Vic Le Billon
The End
www.physics.org keywords: egg, spin