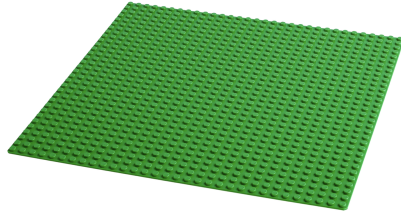
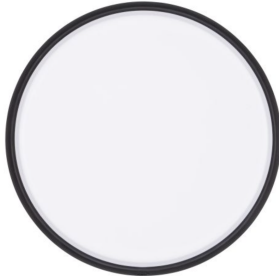


Ordering the *DIY*namics LEGO SPIKE Kit-Based Table

LEGO Parts	Quantity	Cost/unit	Image/Notes
LEGO SPIKE Kit	1	\$399.95	
Base Plate	2	\$7.99	
Tire & rim pack OR Individual tire options	1 1	\$32.99 Varies	 Note: The <i>tire and rim</i> pack comes with 8 wheel sets. Wheels do degrade over time.
Central Cold Source	Quantity	Cost/Unit	Image/Notes
Aluminum can (ex: Paint Can ; quart size, 5.25 cm radius) OR Standard 800 mL glass beaker (~5 cm radius)	1	Varies	 Note: We spray-painted our can white to more clearly view Thermal Wind wrappings!

Stainless steel nuts	1	\$8.88	 Note: Additional weight may be required to ensure the can does not float.
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Measuring RPM (using the SPIKE light sensor)	Quantity	Cost/Unit	Image/Notes
Blue electrical tape	1	\$6.98	 Note: Affix a small piece of tape to the acrylic sidewall to use the "Run RPM" SPIKE program. We found that this color is consistently picked up by the SPIKE light sensor.

Tank System	Quantity	Cost/Unit	Image/Notes
OXO turntable	1	\$19.99	
Acrylic Tank Options	1		Notes: Option 1 (8" diameter x 4" height) will

1. Acrylic Vase 2. Reynolds Polymer R-Cast Acrylic Siding		1. \$17.99 2. \$184 - \$205 (as of Spring 2023)	sit inside the OXO turntable with about a 3-inch margin when centered. It does not require an adhesive. Option 2 is a custom quote from Reynolds Polymer that fits snugly inside the turntable and requires silicone caulking as an adhesive. The dimensions of this sidewall are 14" <i>outer</i> diameter x 4-6" height. This is the option we used in our experiments. Option 2 Contact: Taylor Roberts troberts@reynoldspolymer.com
Silicone caulk (only necessary if purchasing acrylic option 2)	1	\$9.98	
Caulk gun (only necessary if purchasing acrylic option 2)	1	\$10.99	

Dye Supplies	Quantity	Cost/Unit	Image/Notes
Dish soap	1	\$6.62	Note: Needed for breaking surface tension.
Red and blue food coloring (0.30 oz., dropper included) OR Red food coloring , blue food coloring (16 oz. bottles)	1	\$4.99 \$8.50 - \$9.95	

Dropper (optional if purchasing the 0.30 oz dyes)	1 (pack of 2)	\$6.10	
Spray bottles for dye emplacement (needed for convection experiments)	1 (pack of 3)	\$7.70	

Setup and Take-Down	Quantity	Cost/Unit	Image/Notes
5-gallon bucket	1	\$4.76	This is for filling and draining the tank. We do not recommend lifting the tank system whilst it's full of water.
Towel	1	Varies	Paper towels will suffice as well.
Hand pump OR Electric Pump (recommended): Pump , Hose	1	\$29.99 \$59.99, \$14.99	Pumps are not required to drain the tank, however, they do make the process much quicker and easier.