Battery box Item No. 704484	**1**	The power pack that supplies the electricity for the experiments. Before starting the experiments, you will have to install two 1.5-volt AA batteries. You can then collect current from the two terminals (+ and -). Never directly connect these terminals to each other. The batteries and wires can heat up and explode, not to mention that the batteries will be quickly used up.	
Selector switch Item No. 705055	**1**	Depending on the setting of the switch, one or another pair of the three contact plugs will be electrically connected.	
Connector with 4 terminals (X-shaped) Item No. 705050	**20**	For connecting components. The metal plugs of the other components are inserted into the side slits so that they are electrically connected to each other as indicated by the white lines. In the instructions, they are called **"X-connectors."**	
Straight connector with 2 terminals (I-shaped) Item No. 705051	**10**	For the electrical connection of components. The two plugs are electrically connected to each other. In the instructions, they are referred to as **"I-connectors."**	
Angled connector with 2 terminals (L-shaped) Item No. 705052	**5**	For the electrical connection of components, but in a way that guides the current at a right angle. Looks like an "L," hence referred to as an **"L-connector"** in the instructions.	
Connector with 3 terminals (T-shaped) Item No. 705053	**2**	For electrical connections. The three plugs are electrically connected to each other as indicated by the white lines. In the instructions, they are referred to as **"T-connectors,"** because their shape is similar to a "T."	
Red light-emitting diode Item No. 708801	**1**	It emits a red light when current is flowing through it.	

Green light-emitting diode Item No. 708802	**1**	It lights up green when current flows through it.	
Transistor (npn) Item No. 708800	**2**	The transistor is a fundamental electronic building block. It is hidden inside of electronic devices or computer chips, sometimes by the thousands. It serves as an amplifier or electric switch, and will play an important role in your experiments. It has three terminals — it's important not to mix up the different terminals!	
Phototransistor Item No. 708803	**1**	This component reacts to light: It lets electric current pass through more or less easily, depending on illumination.	
Sound-Generator (IC) Item No. 708804	**1**	This red-orange-colored building block produces various kinds of noises, because it has dozens of transistors inside its housing that work together in a complicated manner.	
Speaker Item No. 708805	**1**	It turns signals from the sound generator and a few other things into sounds you can hear.	
Resistor, 1 kilohm (1 kΩ) Item No. 708806	**1**	Resistors allow you to regulate the flow of current. They come in various electrical values, indicated in "kilohms" (kΩ). Careful, always insert the resistor with the indicated value!	
Resistor, 8.2 kilohms (8.2 kΩ) Item No. 708807	**1**	This is just like the 1-kilohm resistor, except this one offers 8.2 times the resistance to the current.	

Resistor, 22 kilohms (22 kΩ) Item No. 708808	**1**	This is just like the 1-kilohm resistor, except this one offers 22 times the resistance to the current.	
Resistor, 120 kilohms (120 kΩ) Item No. 708809	**1**	The same applies as with the 1-kilohm resistor, except this one offers 120 times the resistance to the current.	
Electrolytic capacitor, 100 microfarads (100 µF) Item No. 708810	**1**	Capacitors have important tasks to perform in circuits. They possess various electrical values, indicated in "microfarads" (µF). Install capacitors only as shown in the circuit diagrams. Pay attention to the correct value and the + sign, or they might get damaged.	
Capacitor, 0.1 microfarad (0.1 µF) Item No. 708812	**1**	Here, everything is just like with the 100-microfarad capacitor, except this one has a much lower microfarad value. It makes no difference how you insert this one.	
Red connecting wire with plugs Item No. 706428	**1**	For connecting electronic parts. At the ends, there are contacts that fit into the green wire connectors. Referred to in brief as **"red wire."**	
Blue connecting wire with plugs Item No. 706429	**1**	Like the red connecting wire with plugs, but in a different color. In the instructions, it is referred to in brief as **"blue wire."**	
Divider Item No. 706078	**1**	You can use this tool to pry the inserted components or connectors apart without bending the plugs. Slide it between the components and push the components apart.	

Additionally required household items
These are listed in italic (slanted) letters in the "You will need" sections.

- metal paper clips
- tape
- all-purpose glue
- aluminum foil
- scissors
- cardboard
- white paper
- plastic ruler
- very soft pencil
- cloth
- piece of plastic wrap
- table salt
- drinking glass
- teaspoon
- paper towel tube
- deionized water
- tap water
- thin wire
- flashlight
- TV remote
- digital camera