



Material:

Item Code	Qty	Description
DW116-2S	1	Chladni plate with plug, square
DW116-2R	1	Chladni plate with plug, round
DW115-2S	1	Dusting powder, 100 g bottle
DW452-2S	1	Vibration generator
DG520-1C	1	Connecting lead, double, 50 cm
P3120-4A	1	L-shaped assembly platform
P3120-1G	1	Function generator with digital display "inno"
P3120-1B	1	Rechargeable battery, "inno", 6V/10 Ah

Setup:

The vibration generator is connected to the function generator and placed on level ground. A Chladni plate is placed on the vibration generator and sprinkled with sand.



It should be noted that the plate should only be plugged in or unplugged when the built-in lever is set to "Lock".



Experiment:

The lever on the oscillation generator is set to "Unlock". Now various frequencies are set on the frequency generator. The following frequencies are recommended (variations may occur within a range of 30 Hz):

Rund	Quadratisch
230	160
240	180
250	200
940	230
1020	480
	550
	940

Result:

As soon as the applied frequency is in resonance with a natural frequency, sound figures are formed in the sand. These are standing transverse waves at whose nodes the grains collect. Since the plates have different natural frequencies, different sound figures can arise.

Note:

If you grab a point on the plate, other sound figures can emerge.



