**SC-1\_MW Checklist for Physics 103**

For each table, verify the presence of:

1 Electrically driven speaker

1 pulley and table clamp assembly

1 Pasco interface

1 Power amplifier

Electrical Connector from power amplifier to Pasco interface.

In the lab room, verify the presence of:

Box containing weight hangers and slotted masses.

8 Rulers.

Electronic weighing scale.

Connectors with banana pins on both ends.

At least 1 Spool of black Dacron string and a pair of scissors.

A spool of tape

White papers

 For each table, verify functionality:

The electrical speaker can be clamped tightly to the table

The height of the pulley can be adjusted and the pulley remains stable at various heights.

Make all the necessary connections between the Amplifier, the speaker and the Pasco interface. Launch the SC-1 data studio file on the desktop or from the lab instructional page. Start the data studio file and verify the following:

The needle/pin on the speaker, through which the string passes, is tightly attached to the speaker and does not wobble independently when the speaker is vibrating.

The speaker vibrates smoothly without interruptions and without making loud clicking sounds in between. Repeat the above for amplitudes of 1, 2 and 3V and frequencies between 100-200 Hz.

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Changing the amplitude and/or frequency in the data studio file changes the amplitude and/or frequency of the vibrations of the speaker

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