12080 Puck Set, Balloon

Purpose:

To provide low friction pucks for motion studies without the necessity of an air table.

Assembly:
Insert a plastic tube into the smaller end of each rubber stopper. Slip the neck of a balloon onto the large end of
a rubber stopper. Fasten the balloon to the stopper by wrapping a rubber band around the neck of the balloon three or four times. The balloon can now be inflated and pinched shut, or it can be inflated later. Place the free end of the plastic tube through the hole in the top, then the middle, and finally the bottom pieces of one puck. Make sure the plastic passes through the bottom piece but does not protrude. This is all that is needed to hold the puck together. During assembly, large washers or other symmetrical objects can be adhered to the middle part to change the mass of the finished puck. The plastic tube is long enough to hold two pucks on top of one another to quickly double the mass. The puck is now ready for use. When it is placed on a smooth flat surface, it will float on a thin cushion of air minimizing any resistance to movement due to friction. When choosing replacement balloons be mindful of the intended use. If the balloon is too large, collision experiments may not work because the balloon may collide with the obstacle
before the puck does. This product is best used to explore the law of inertia on a horizontal surface and uniform acceleration on an inclined smooth surface.

Time Allocation:

To prepare this product for an experimental trial should take less than ten minutes. Actual experiments will vary with needs of students and the method of instruction, but are easily concluded within one class period.

Feedback:

If you have a question, a comment, or a suggestion that would improve this product, you may call our toll free number.